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Transformative Psychedelic Experiences at Music Events: Using Subjective Experience to Explore Chemosocial Assemblages of Culture

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Transformative Psychedelic Experiences at Music Events:
Using Subjective Experience to Explore Chemosocial Assemblages of Culture

by

Gabrielle R. Lehigh

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Anthropology
College of Arts and Sciences
University of South Florida

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Keywords: chemoethnography, recreational substance use, set and setting, community,
liminality, pleasure

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DEDICATION

This work is dedicated to:

- The psychonauts - those brave and curious enough to explore the uncharted territories of consciousness.
- My future husband, Jarrett Rogers, and our beloved bunnies Nibbles and Bunzee. You are my rainbows in the darkness.
- The loving memory of Phil Ebright - love and light all day and all night.

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ABSTRACT

Clinical interest in psychedelic treatments in the United States started in the 1950s, but anti-drug policy and anti-social sentiments quickly thwarted future research. The last decade has renewed clinical interest in using psychedelics to treat a diversity of mental health ailments. While these studies provide essential protocols, treatments, and therapy models for patients, they are limited in understanding the role of the contextual elements that influence psychedelic experiences and outcomes. This project examines how people use psychedelic substances outside medical settings by studying transformative psychedelic experiences at music events. This inquiry into psychedelic use utilizes an integrated framework of chemoethnography from environmental studies with classic drug use literature and anthropological studies on indigenous and pharmaceutical healing practices to consider the assemblages, entanglements, and mechanisms that contribute to meaningful experiences. Additionally, this study addresses the need for information on how people use psychedelics outside medical settings and how these uses can be therapeutic. As clinical settings individualize treatment, music festivals provide a contrasting environment to identify additional contextual factors and how they contribute to creating these experiences. The results of this dissertation stem from 18 months of fieldwork consisting of 38 interviews, 523 survey responses, and over 650 hours of participant observation. This research finds that the carefully crafted spaces of music festivals featuring art, music, and community vibe are essential to initiating liminal experiences and allowing festival goers to fully embody the pleasure of the psychedelic experience. The entanglements of the music festival and

the psychedelic experience give way to complex and supportive social lives that function as therapy management groups through conversations of support and care before, during, and after the experience. This unique environment has the potential to support therapy, healing, and transformation. Participants report the value of these experiences through long-term changes in their internal process of self-reflection and changes in everyday life. This research sits on the cutting edge of anthropological theory by pushing the field towards an “anthropology of the good.” It investigates these experiences to inform future treatment opportunities in addressing the needs of the suffering subject while bringing attention to the diversity of modalities in therapy and healing.

CHAPTER 1:

INTRODUCTION

Dance to the Music, Listen to the Music, See the Music

So now it's starting to get dark. There're lights flashing all over the place. I can feel, like, just the bass from the music. And you know, people start dancing. People are cheering, and it's like starting to freak me out a little bit, right? So, I can't find my friends. I don't know what's going on. I just stopped, and I just lay down on the grass. And I'm like praying for it to stop for a moment.

And now, granted, I'm a kid, right? So, I'm a kid curled up in a ball in the middle of a concert ground out in the Everglades. And this couple comes up to me. And they asked me if I was okay. And I was like, "not really." And I told them what I did. And they were like, "Oh, shit." So, they sat down with me. And they basically were just talking to me, like, just kind of holding me and helping me out for a little bit. And then they got me up. And they were telling me, "Let's get it out. Just go with it. Dance all right."

And that's exactly what I did. And it was wild. Like, I mean, it was the craziest thing I've ever experienced. But it was like, I realized that you know, I couldn't fight it. And the more I fought it, the more it freaked me out. And the more I thought, the more I just wasn't letting it happen. My subconscious was stepping in, basically.

So then, after that, I just started listening to the music. Next, I could see the music. I could feel everything that was going on. Looking at the sky, it was just like this whole entire city

pattern of geometrical rainbow, like electrical rainbow and kind of like squares, and like hexagons and things were like turning into, like small cities. It was just like, as the music was playing, the whole environment was changing.

And then I realized I was like, “wow, this is like really, really, really cool.” I was like, “I've never felt this way my entire life.” I could feel like when I was growing up, one reason why I would always lash out and kind of resort to these types of things is my father died when I was young, and I had a really hard time in school. I had a really hard time just coping with my own issues in general, which kinda was one of the things I would never admit to myself. Now I'm 15, and you know, I've had really huge anger problems. Like I would fight all the time, and I would get into all types of shit and just trouble lashing out for no reason to do it. But I did it anyway. But it was just like one of those things that I just like; I think it was the mushrooms doing it to me, but I yawned really, really, really hard. And I felt like I could feel stress leaving my body. I felt my muscles were; I felt more agility. I felt like I didn't have knots in my back like I wasn't tense anymore. And it was like I just wasn't angry, you know. I wasn't thinking about anything other than just how it felt and how good it felt. Once I started appreciating it, I sat down on the grass and I took my shoes off. And it was almost like, I could just feel the energy going through me.

Sebastian was 15 years old at his first music festival when he had this experience while watching Phish perform for the first time. Over 15 years later, he conveyed the details of this story to me. He emphasizes the importance of this experience in tapping into unexplored emotions around his father's death when he was a child, connecting them to his anger-driven

behavior, and finally relinquishing them. This story is one of countless that bring together psychedelics, music events, and transformation.

Towards an Anthropology of the Good

Robbins (2013) and Ortner (2016) call for anthropology to embrace alternative perspectives that highlight well-being, empathy, care, and hope. Considering the current historical moment of collective suffering amidst COVID-19 and social injustice, burdened by isolation, working to reconnect social spaces while dealing with trauma and attempting to heal, there is no better time to move toward an “anthropology of the good” (Robbins 2013:457). This project proposes studying change and healing by examining how recreational psychedelic use at music events creates transformative experiences for people who use psychedelics to advance this movement forward.

Research trends on drug use practices and psychedelic studies from biomedical and cultural perspectives inform the proposed research. Early clinical studies on psychedelics in the United States started in the 1950s, focusing on recreating psychosis (Grof 2008). Throughout the 1960s and until the prohibition of many street drugs in the 1970s, clinical studies focused on therapeutic applications such as treating addiction (Savage et al. 1964). The emergence of the psychedelic renaissance in the 2000s brought renewed interest in studying a diversity of psychedelics for many ailments, including psilocybin (mushrooms), MDMA (ecstasy), ibogaine, LSD (acid), ketamine, and ayahuasca in the treatment of anxiety, depression, post-traumatic stress disorder, substance use disorders, and obsessive-compulsive disorder (Wheeler and Dyer 2020). Additionally, cultural studies examine indigenous practices of psychedelic use. For example, in South Africa, *Boophane distich*, a hallucinogenic bulb, is used by the Basuto people

in male initiation rites to communicate with ancestors (De Smet 1996; Rudgley 1998). Studies on ayahuasca ceremonies investigate the role of music in creating spiritual experiences in religion (Labate and Pacheco 2010). Other anthropologists explore peyote in treating alcoholism in Native Americans (Albaugh and Anderson 1974) and ayahuasca in determining the cause of illness (Dobkin de Rios 1972). These cultural studies are instrumental in understanding non-Western practices of psychedelic use and their potential to heal ailments.

While clinical studies highlight the benefits of psychedelics for individualized treatment and cultural studies highlight non-Western practices, they lack discussion of recreational drug use in Western cultures. By recreational, I mean non-Indigenous, non-spiritual, and non-medical use of psychedelics. In particular, the literature is void of documenting diverse experiences of recreational psychedelic use in everyday settings. These everyday settings include natural environments, music events, private homes, and nightclubs (Bøhling 2017; Davis et al. 2018; Haden et al. 2016; Hartogsohn 2016; Vitos 2017). Although there are various everyday settings for psychedelic use, the scope of this study examines music festivals and events because it is one of the main sites for recreational psychedelic use. Examining these environments of use is essential because current research on psychedelic experiences in recreational environments, like in nature or at music festivals, supports that recreational psychedelic users experience transformative benefits, including feelings of peace, self-empowerment, unity, creativity, spirituality, and increased openness and connectedness to people and nature (Hunt et al. 2009; Kavanaugh and Anderson 2008; White et al. 2006). Clinical research reiterates these findings (Brown et al. 2019; Griffiths et al. 2006), but limited research exists on how these experiences occur in recreational settings. How does the music festival setting support or restrict the ability to have meaningful psychedelic experiences? This proposed research examines Western practices

of psychedelic use outside Western medical settings to understand the nature of transformative experiences. Using music festivals as the primary research site, this study examines how the combination of the drug, set, and setting creates opportunities for transformation compared to current clinical settings. Understanding the context and mechanisms that result in transformational change in an everyday setting can provide insights for future recreational drug policy and psychedelic-assisted therapy treatments. In addition, these applied applications of the research findings contribute to the goal of an anthropology of the good by promoting well-being, empathy, care, and hope.

October 2, 2021

I skim over my initial notes in my trip journal, preparing for the experience ahead. Under the heading of the date reads:

Substance: LSD (liquid) – 200 ug (2 hits) (due to evaporation, it ended up being at least 800 ug or 8 hits)

Intention:

- 1) To let go and allow whatever comes up to come up – and in appropriate moments, use mindfulness to recognize the things that come up.
- 2) To allow myself to be open to feeling and expressing all things around Nibbles and his death – all conscious things and those that reveal themselves from my subconscious.

I close my journal and place it on the table next to me as I settle back into the mound of pillows strewn about on my brown leather pull-out couch in the center of my small living room apartment. My friend and trip sitter, Nathan, gets comfortable in the oversized matching brown leather chair perpendicular to the couch I am on. I pull the black eyeshade over my head and place the noise-canceling JBL headphones over my ears as Nathan starts Mendel Kaelen's Psychedelic Therapy Playlist 1 on Spotify. I think, "It's been 64 days since my beloved rabbit, Nibbles, left this Earth while snuggled in my arms. The rabbit that once saved my life is with me no more."

The effects of the LSD start to settle in, and after an incalculable amount of time passes, I take the headphones off, lift the eyeshade, and sit upright from off the mountain of pillows. I just sit there for a moment, staring at Nathan.

"I feel bliss and even a bit of ecstasy," I say with a sense of surprise while looking around the walls of the apartment, adorned with colorful psychedelic art of band posters, galaxy paintings, and the popcorn ceiling that starts to radiate red, blue, and green rainbows. "Things look more colorful and geometric," I mention as more patterns start forming in my vision.

"Have you thought about Nibbles?" Nathan asked.

I turn my attention to him. I have not seen or thought about Nibbles up to this point in the trip. I turn my gaze from Nathan's face to the shoe cabinet I have claimed as Nibble's memorial space, sitting to the side of Nathan's oversized chair. A small stream of tears escapes from the corner of my eyes and runs down my cheeks.

"I miss him so much," I whisper to Nathan as he stands up, grabs one of Nibbles' pictures from the shoe cabinet, and hands it to me. I spend a minute looking at his photo and taking in all the details of him. The extent of the LSD starts to hit me as his furry bunny face turns back and

forth in the photo as if he is standing right in front of me. I replace the eyeshade over my eyes and settle the headphones back over my ears. Laying back onto the pillows, hugging Nibble's photo to my chest, the tears flow down my face, waterfalls of my grief. I leave out a groan as the weight of his missing presence in our apartment and my life settles into my sternum, leaving me with the full depths of heartbreak and breathlessness. Inside my psyche, I find myself in a boundless black void, floating in infinite space, unable to see any trace of light in existence – a reflection of my feelings – lost and alone in my grief over the death of my beloved rabbit. Grey wisps, smoke-like figures, and light flashes briefly show themselves in the void but quickly dissipate into the abyss. Their presence feels like issues, memories, concerns – parts of my psyche, but they were not what I sought.

“What am I looking for? What am I supposed to find?” I question into the black void. Then, after a moment of silence – he appears! Right in front of my third eye – a view looking at him from under his grey furry chin, where I could see his perfect little mouth—composed of thin iridescent and neon paint brush marks of dancing energy and matter. Overcome with rushes of joy, happiness, and pure love as visions of us fill the black void – a direct connection of soul touching soul. We are pure energy beings dancing and connecting in complete and total synchronicity. Like no time passed, and the concepts of the Earthly world merged with that of the spiritual one, we were never separated as I cry out to Nathan, “I found him!”

I sit in the bliss of being reconnected to Nibbles. Then, after some time, my hands resting right-over-left on the back of Nibble's picture frame settled over my stomach, just below my chest; I feel someone else's hand gently clasp over mine. I think, “This isn't Nathan's hand. He's sitting on the opposite side of the couch.” Confused, I ask my psyche again, “What is this? Who is this?”

Two faces emerge in my vision, my father's deceased parents, my Grandma Marie and Grandpa Ed. It was the answer to my question. Then, more faces appeared – other family members and previous pets, long deceased. The crowd of faces grew and grew until I saw the faces of everyone who ever lived on Earth – everyone who came before me and no longer was here. It is a larger collective – a greater source – together, holding me and providing me space to grieve and feel all the things I needed to feel in the moment. They gathered, holding me in the palms of their hands as I lay there in the fetal position, shrouded in my naked vulnerability and grief. They held me and said, “We are here to hold you, protect you, and give you this space that the material world isn't providing you.”

I was free. Free to feel. Free to hurt. Free to love. Free to be loved. Free to grieve.

This story is only a glimpse into the looking glass of the larger narrative that shaped the existence and direction of this dissertation. Ultimately, it all started with a rabbit, Nibbles, who, in conjunction with my now soon-to-be husband, took me down the psychedelic rabbit hole. This journey saved me from a past of childhood trauma, unidentifiable emotions swallowed by anxiety, and the enslavement of chemically mediated neurological perceptions of productivity, success, and happiness. In this journey, I have logged countless hours of transformative altered states of consciousness in various settings, providing me the tools to shift my worldly perspective and pull myself out of the loop of childhood trauma that plagued me for decades. These experiences continue to educate and shape my life's meaning and ways of being in the world, including the experience I share above in working through my grief over Nibbles' death. Additionally, these experiences present me with inquisitive insights about the psychedelic experience, what it is and what it means for other people. This project is a product of my

transformative psychedelic experiences. In many ways, I felt called to give back to the plants and chemicals that provided me with so much therapy and healing. In other ways, I see my privileged position as an academic to use my platform to collect and project other people's transformative narratives to educate others and advocate for change. This dissertation examines the interactions between people and psychedelics and how they create opportunities for meaningful life change outside Western medical practices while emphasizing the context of these relationships in shaping such experiences to meet these goals.

Constructing a Chemoethnography of Psychedelics

This project uses chemoethnography to understand how psychedelics' pharmacological effects and the context of recreational psychedelic use elicits transformation and meaningful experiences. Chemoethnography uses qualitative methods to examine the interactions between people and chemicals (Bargielski 2020, Fortun 2012, Kirksey 2020, Shapiro and Kirksey 2017). Chemoethnography is an assemblage of ideas, thoughts, and practices from biology, ecology, chemistry, and anthropology to examine the interactions between people and chemicals to understand how people and chemicals form relationships or chemosocialities. This perspective incorporates the pharmacological effects of chemicals with the interactions of people. Chemosocialities refer to how people socialize around chemicals and how that socialization creates new relationships between people and chemicals. Chemoethnography considers how the context of these human-chemical relationships converge to develop and support reiterative human-chemical social lives.

Scholars who engage with chemoethnography have previously used the concepts to study the shifting social patterns of endangered frogs in the presence of industrial chemical by-

products (Kirksey 2020), the human-chemical relationships with environmental intoxicants at Superfund sites (Bargielski 2020), and the creation of new social communities in the shared pleasures of recreational drug use (Pine 2016). In this study, I expand on chemoethnography in examining the relationships between the pharmacological effects of psychedelics and the contextual elements of music festivals and recreational psychedelic use. This application of chemoethnography will search for the moments where the pharmacological effects of a substance (MDMA), the practice of psychedelic use (dancing and socializing), and the environment of music events (art, nature, music) come together to understand transformative experiences better. Essentially, chemoethnography serves as a framework to examine how the setting of music events enables or constrains chemosocialities.

I use the framework of the drug, set, and setting from other recreational drug use studies to inform my chemoethnographic approach. Although there is limited knowledge on how transformative psychedelic experiences occur, drug research argues that drug, set, setting, and practice influence experiential outcomes. The drug is the substance, the dose, and the pharmacological effects on the consumer (Zinberg 1984). The set is the psychological state of the person using, such as intention, cultural beliefs, mood, past substance use, mental health, and past trauma (Leary et al. 1963; Zinberg 1984). The setting is the physical, environmental, social, and cultural contexts, such as lighting, decorations, location, and music (Leary et al. 1964; Zinberg 1984). Combined, the drug, set, and setting influence practice which is the ritual of drug use (Zinberg 1984).

While chemoethnography is a diverse and broad approach, I am specifically applying it to psychedelic use. To develop the chemoethnography of psychedelics, I draw from Zinberg while also recognizing the materiality of substances, settings, and practices of people's use. At the

infrastructural level, the study will identify the substance and dose consumed, the location of consumption (campsite or a music set), the social environment of consumption (with friends or individually), and physiological changes (visual and auditory distortions, physical sensations). The structural level will examine the mental state before, during, and after the experience and personality characteristics (age, gender, perceptions of substance use, substance use history). Superstructural elements of the study include observing the activities individuals engage in before, during, and after taking psychedelics, socialization patterns with friends, strangers, and event organizers, and interactions with the physical environment, like dancing to music.

Considering the pharmacological impact of chemicals, chemoethnography looks at how human-chemical interactions form relationships where chemicals and people work together to create diverse experiences (Shapiro and Kirksey 2017). For instance, the release of serotonin from MDMA (ecstasy) elicits feelings of connectedness and combines with dancing to music and socializing with friends to form the pleasurable experience of MDMA. Chemoethnography can identify characteristics of transformative experiences (unity, compassion) and relate them to transformations (mental and behavioral changes) by observing the pharmacological effects of psychedelics (visual and auditory distortions), and the context of use (intention, music). This framework unravels the complex and supportive social lives that emerge from human and psychedelic interactions within the context of their use at music festivals. The combination of the chemoethnographic and materiality framework is essential to understanding the elements in recreational psychedelic use that contribute to change, well-being, and the reconfiguration of social relationships.

Music events, specifically raves, electronic dance music, and jam-band festivals, are one of the main sites where people use psychedelics recreationally (Bøhling 2017; Dilkes-Frayne

2016; Fox et al. 2018; Redfield 2017). By looking at one of the most popular recreational uses of psychedelics, this research will gather data to understand better how people form relationships with chemicals in recreational settings. At these events, people are looking specifically for psychedelics' chemical and biological effects while also recognizing how the setting plays a central role in their relationship and experience with psychedelics. Studying the setting where these experiences occur is vital to understanding place-based meaning-making as a component of human-chemical relationships that contribute to transformation (Bloch 2018). For this study, the chemical focus is on psychedelics, specifically LSD, MDMA, psilocybin, and ketamine.

Study Purpose and Objectives

My research aims to collect observations, narrative stories, and quantitative data of transformative psychedelic experiences at music events to highlight the therapeutic value of recreational psychedelic use and inform and expand clinical psychedelic studies and treatment. Stories of transformative experiences in recreational settings highlight essential contextual factors of everyday psychedelic use that contribute to profound experiences, like music, art, dance, and socialization, missing from current clinical studies. While clinical trials are quickly advancing to support psychedelics in treating various mental and physical ailments, these studies have light-years of work moving forward to understand the contextual factors that make psychedelic treatment successful. Psychedelic treatment is uniquely positioned to provide new avenues for healing, considering the historical moment of collective suffering. However, it requires a nuanced understanding of context to maximize therapeutic potential. Focusing on the context is essential because it directly relates to the outcome of the experience. Anthropology is well-suited to investigate this future for healing because “qualitative research is a valuable

method for gathering a nuanced and comprehensive understanding of the results of psychedelic-assisted studies, it also suggests that there is more to recovery than reducing symptoms” (Doblin et al. 2019: 95). My study on transformative psychedelic experiences at music events provides the missing contextual element essential to advancing the clinical application of psychedelic treatment and research.

To investigate how relationships between psychedelics and people combine with the unique environment of music festivals and shape psychedelic experiences, I propose the following research questions:

Question 1: **What are music festivals' most prominent contextual elements that contribute to transformative psychedelic outcomes?** What are the physiological effects of psychedelic drugs? What are the physical, social, and cultural components of the setting? What are the psychological factors of the set?

Question 2: **How do the contextual elements of music festivals converge to create transformational experiences for participants at music festivals?**

Question 3: **What does transformative mean within the context of psychedelic experiences at music festivals?** What does transformation look like? How do participants define it? How is it differentiated from other forms of psychedelic experiences?

Chapter Organization

Chapter one introduces the dissertation and outlines a basic theoretical and methodological framework to situate the study's purpose, objectives, and contributions.

Chapter two presents a theoretical literature review of anthropological concepts and related philosophies. This chapter reviews chemoethnography as a method of studying

chemosocialities and how the components of this model meld with more-than-human ontologies, contextual elements of experience, and work on therapy and healing to establish the chemosociality of psychedelics.

Chapter three provides a background review of the history of drugs in the social, cultural, and legislative contexts. This assessment examines how global, national, and local powers influence the waves of acceptance and intolerance towards drug use, along with recent drug policy trends in decriminalization, medicalization, and legalization. Additionally, I discuss drug policy's social and cultural implications in the United States (US). Finally, I provide an account of psychedelic research in the US, reviewing past and current Western biomedical studies, shamanic and indigenous therapeutic practices, and recreational psychedelic use.

Chapter four outlines my research approach and analysis procedures. I use participant observation, narrative interviews, and an online survey to engage in chemoethnography. I also cover the limitations of the data, a discussion on representing participant experiences in research, and ethical considerations. The initial four chapters construct the foundation for my research findings presented in Chapters 5 through 8.

Chapter five, "Journey Down the Rabbit Hole," sets the tone of the music festival environment using participant observation and field notes. I start by painting an image of what the otherworldly playgrounds that are festivals look like by describing the layout of the festival and the stage and art production. Then I add the dynamic movement of people within this crafted space, showing the human aspect of the festival. What people wear, what drugs they take, how they socialize, and how these cultural elements create a sense of community unique to the festival scene.

Chapter six offers an overview of the survey data, including what kind of events people attended during their experiences and what drugs they took. I also examine the meaning of mystical experiences measured by the Mystical Experience Questionnaire (MEQ) and potential relationships with the Psychological Insight Questionnaire (PIQ). Additionally, I investigate the role of significant factors in contributing to transformative experiences.

Chapter seven looks at the individual elements of context, including the drug, set, and setting, as participants describe through their interviews and open-ended responses on the survey. The results in this chapter highlight the role of the contextual pieces that are vital to contributing to overall psychedelic experiences at music festivals.

Chapter eight is the second thematic qualitative chapter and addresses the question of what transformative psychedelic experiences are. I investigate what these experiences mean to participants through their interviews and open-ended responses from the survey. Ultimately, transformation is a process that includes shifting thought patterns coupled with changes in everyday patterns and ways of being.

Chapter nine, “The Chemosociality of Psychedelics at Music Festivals,” situates the data presented in the previous four chapters into a conversation with the literature. This chapter identifies pieces of the music festival context and its processes to understand how they come together in complex and dynamic interactions in psychedelic experiences that result in meaningful, transformative outcomes, and new human-chemical relationships using chemosociality as a guide. I also offer a reflection on positionality and conducting chemoethnography in the context of recreational drug research.

I end the dissertation with Chapter ten, recapping the key findings and discussing the limitations and future directions of the research, the contributions to anthropology and other fields of study, and the applied implications of the study.

A Note on Language

There are many terms used to discuss drugs and drug use. To confirm the meaning of these terms through this dissertation, I think it is essential to provide a short statement on the language I use. First, MDMA/MDA are two similar but different drugs. The base of their chemical makeup is the same, which makes their physiological effects similar. At the same time, there are a few slight differences in their chemical structure, which create slightly different effects. MDMA is more empathogenic and MDA is more psychedelic. Many people do not know the difference or consider them the same drug. Many times, participants refer to them collectively as Molly or ecstasy. Because of this, participant quotes and my discussions may use these terms interchangeably throughout the dissertation.

Second, I studied multiple types of music events. Some were single days or nights, while others were multi-day festivals. I often use the term music festival to represent all music events, as most of the events I attended were music festivals. Note that this term represents all the music events attended for the study.

Third, in an attempt to be culturally relative and respectful to the diversity of people and their agency within this space, I use specific terms to describe drug-related concepts and objects. For example, I do not use the term hallucinogen when discussing psychedelics or psychoactive drugs. This term can represent pejorative language to people who use psychedelics because “it is an expression of phenomenological distrust to visual phenomena the users may perceive in the

altered state of consciousness after its ingestion” (de Mori 2016). Using the term hallucinogen over psychedelics can discredit or dismiss people’s visual experiences and accounts.

Additionally, the concept of a hallucinogen is a product of the Western biomedical model. In the context of indigenous practices, using such a term places an ethnocentric Euro-American perspective on such groups. I also refrain from using the term marijuana unless it is legislative titles or quoted literature. Marijuana has a racist history associated with disobedient minority populations. As an academic, I opt for the term cannabis to shift the narrative away from potentially harmful connotations. Finally, to respect the agency and identity of people, I do not use the phrase “drug user” as it ascribes someone’s identity as intrinsically connected to the practice of using drugs. Instead, I use the phrase “person who uses drugs” to disconnect their identity from drug use.

CHAPTER 2:

CONSTRUCTING A CHEMOETHNOGRAPHY OF PSYCHEDELICS

Introduction

This chapter presents the theoretical discussion of human relationships and processes of meaning-making with more-than-human things initiated by psychedelics. The anthropocentric view assumes humans to be the ideal measurement of survival, existence, knowing, and being. In reality, “We are ecosystems that span boundaries and transgress categories. Our selves emerge from a complex tangle of relationships only now becoming known” (Sheldrake 2021:19). To understand the dynamic nature of humans requires studying the dynamic and more-than-human contexts that create them or the “ecology of selves” (Kohn 2013). “Ecology of selves” refers to the more-than-human contexts beyond the human species that shape human experience. An “ecology of selves” aligns with Bateson’s (1972) definition of the mind. Bateson (1972) argues that the mind exists as part of a more extensive integrated system that involves the external world. An “ecology of selves” draws on this by arguing that humans interconnect with more-than-human contexts. As Bateson argues that the mind cannot disconnect from the external systems that support it, the human cannot disconnect from its non-human contexts. Attempting to define the human within the term “species” fails to capture the expansive nature of the term that encompasses physical, emotional, spiritual, environmental, and structural ecologies. For example, more-than-human means leaf-cutter ants that domesticate fungus (Sheldrake 2021), companion relationships between dogs and humans (Haraway 2003), chemical relationships

between frogs and toxic chemical byproducts (Kirksey 2020), political-economic relationships between mushrooms, forests, and producers (Tsing 2015), entanglements between people and plants (Faudree 2020), and pleasurable relationships between psychedelics, dancing, and music festivals (Duff 2008). Adapting a more-than-human approach to studying what it means to be human breaks down anthropocentric perspectives. It assumes human ascription of agency to more-than-human forces that merge with human lives in socially dynamic ways that “changes our understanding of what selves are and how they emerge, dissolve, and also merge into new kinds of *we* as they interact with other beings” (Kohn 2013:16).

In this chapter, I critically engage a diversity of literature to develop a working framework to understand an “ecology of selves” or the tangled pieces of more-than-human forces that shape human experience. Considering the dynamic nature of the more-than-human perspective, I integrate theory from many fields of study to conceptualize the chemosociality of psychedelics. This means how people use psychedelics (chemicals) and develop relationships with them and through them in ways that allow for new relationships with other humans and more-than-human forces. I emphasize the processes and more-than-human forces that shape human relationships through discussions of entanglement, posthumanism, multispecies, and materiality, along with key literature on the context of drug use. I also review literature highlighting the concepts of therapy and healing concerning humans, more-than-human actors, context, and alerted states of consciousness. I cover this material by structuring this chapter into two sections. The first section builds chemoethnography and chemosociality as a theory, defining the components of assemblages, entanglements, and intra-actions. This section is essential to laying out the theoretical framework to understand how different parts of the whole come together in complex and dynamic ways to create new social relationships with chemicals. The

second section applies this theoretical framework to the recreational and therapeutic use of psychedelics. This section uses classic literature to expand on the ideas of becoming, the drug, set, and setting, and therapy and healing. I do this by integrating these concepts into recreational psychedelic studies and the framework of chemoethnography and chemosociality. Coalescing these pieces into a chemosociality of psychedelics is crucial to developing a holistic, tangible, and applicable framework for studying subjective psychedelic experiences.

Using Chemoethnography to Study Chemosociality

Chemoethnography is a method of studying chemosociality. Both terms stem from ideas and practices implemented throughout diverse fields of study to understand how humans interact with chemicals. Each engagement of chemoethnography requires constructing a new definition of chemosociality depending on the intended context of use because the chemicals and human interactions change in each context. These changes result in diverse outcomes and relationships between humans and chemicals. The custom construction of this ideology comes from reviewing and analyzing other applications of the term and resituating the concept within its proposed use in research. This study proposes the chemosociality of psychedelics and pulls from various fields of study, including physics, philosophy, psychology, sociology, and anthropology. This section presents the key theoretical concepts that construct the meaning and application of the chemosociality of psychedelics.

There is no single practice of chemoethnography or definition of chemosociality. Instead, Shapiro and Kirksey (2017) use chemoethnography to ask, “how are molecular frictions, catalytic dynamics, and forms of not-Life and other-than-life reconfiguring our conditions of knowing, being, and sociality?” (482). In this definition, “molecular frictions, catalytic

dynamics, and forms of not-Life and other-than-life” refer to the “chemo” in chemoethnography or the chemicals that humans encounter (Shapiro and Kirksey 2017:482). These interactions can result in new relationships and ways of being in the world, what Shapiro and Kirksey state as “conditions of knowing, being, and sociality” or chemosocialities (2017:482). Ultimately, the central idea of chemoethnography is to use methods of ethnography to examine how relationships and processes of meaning-making emerge from the interactions between humans and chemicals.

The Components of Chemoethnography

While chemoethnography is the method for studying the human processes of meaning-making and social relationships, many actors contribute to these processes, including what some chemoethnographers term assemblages, entanglements, and processes of intra-action. Assemblages are the collective gathering of individual parts, such as how soil, air, water, and rocks come together to form elements of the Earth (Deleuze and Guattari 1980; Haraway 2008; Latour 2005). In Shapiro and Kirksey’s framework of chemoethnography, assemblages are chemicals and “forms of not-Life and other-than-life.” This classification means chemoethnography studies not only chemicals but also the holistic non-human actors that contribute to creating chemosocialities. Additional non-human actors can include contextual elements of human interactions, such as the physical and material environment, social, political, and economic institutions, and sentimental relationships (Shapiro and Kirksey 2017). Erickson’s (2007) work on radon health mines in Montana highlights the converging assemblages of people, radon, public health media campaigns, and cultural models and experiences that redefine radon as a healing substance. This study accounts for the physical interactions between humans and

radon and the structural factors, like cultural models of healing and experiences, that reinvent health narratives. Hardon and Sanabria (2017) provide an example of how changing contexts shape pharmaceutical efficacy. As pharmaceuticals move through the contexts of research and development, regulation, advertising, and care practices, their efficacy and meanings change. For example, the assemblage of space, relationships, and clinicians' expectations in clinical settings shape pharmaceutical efficacy. In providing care to patients, this efficacy shifts to meet the patient's needs. As the assemblages around people and context shift concerning pharmaceuticals, so do their meanings regarding efficacy.

These new identities and emerging socialities are called chemosocialities or social-chemical relationships. Chemosociality stems from Rabinow's (1996) concept of biosociality, where people sharing biological conditions form new social networks, such as those living with HIV/AIDS (Tiktin 2006; Marsland 2012). Kirksey (2020) applies the concept of biosociality to chemicals by defining chemosociality as "altered, attenuated, or augmented relationships that emerge with chemical exposures" (24). For example, Kirksey's (2020) study of endangered green and gold bell frogs found a surprising relationship where the toxic environment in the Sydney Olympic Park provided a conducive environment allowing these endangered frogs to thrive. The relationship between toxic chemical byproducts in the environment and the biology of the green and gold bell frogs ushered in a chemosocial relationship that allowed the endangered frogs to breed and thrive. Van der Geest and Whyte (1989) examine how pharmaceuticals engage with human relationships to initiate social processes. They found that how people acquire medications creates new social relationships. When people purchase pharmaceuticals from different suppliers or sources, it gives them the freedom to remove themselves from prior social constructions and enter new ones. Essentially, coming in contact

with pharmaceuticals in different contexts initiates new socialities. Chemosocialities are the new relationships, new social identities, and new meanings of what it means to be human that form from the complex web of intra-actions between humans and chemicals within specific contexts composed of environmental and structural actors. Chemoethnography provides a unique framework that focuses on the relationships and processes between humans and chemicals to study and understand how they create chemosocialities.

Human and non-human actors can entangle in more complex ways than simple interactions. Quantum physics defines entanglements as the physical phenomenon of how a group of particles interacts so that the state of each particle in the group is indescribable independently from the state of the others (Wu 2020). In the same way, the entanglement of humans with chemicals and non-human contextual elements is not separate from those of the entanglement itself. Tsing (2015) explores such entanglements in studying the commodity chain of matsutake mushrooms by bridging the complex web of traders, goat herders, and nature guides with industrial forests, fungal ecologies, forest histories, and human destruction. Similarly, Kloos (2017) applies a similar approach as Tsing to studying the overarching pharmaceutical industry. Using the concept of pharmaceutical assemblages, Kloos (2017) examines Sowa Rigpa, or the Tibetan medicine industry. In linking the raw materials, drug-manufacturing process, market, and intellectual property rights, Kloos unravels the complex and multi-layer components of health care and environmental, political, sociocultural, and economic contexts that entangle to establish this industry. The elements encased within the matsutake mushrooms and medicines industry are not considered individually but are described as fluid, dynamic entanglements composed of people and things (Bargielski 2020; Deleuze and Guattari 1980; Ogden et al. 2013).

These constantly changing entanglements of actors are describable within processes of intra-action. Much like entanglements, intra-action originates from physics and functions on the premise that people and things are entangled and not independent of one another. Based on this assumption, when people and things intra-act, they do so in co-constitutive ways, meaning their agency comes from their relationship with other actors and not from outside of it (Barad 2007). Compared to interaction, the agency of people and things comes from outside the relationship because they have a level of independence from one another. Using a multispecies perspective, Kirksey (2015) describes the process of intra-action as a symbiotic process of merging actors with the result of creating new identities and socialities for the humans and multispecies actors involved in them. This project is interested in understanding the processes of intra-actions in the recreational use of psychedelics. It looks for the entanglements between the context of psychedelic use, people who recreationally use psychedelics, and the psychedelic experience. This project uses intra-action to ask how these elements merge to create new identities and socialities. What processes bring these elements together to create transformation from the recreational psychedelic experience?

Chemosociality and Chemoethnography in Context

The focus of studying chemosociality is to examine the unique entanglements of humans with chemicals to understand social relationships. Implementing this framework while using chemoethnography is unique and varies across many topics. For example, in the case of breast cancer patients, Jain (2013) discusses the shared experiences of women navigating the medical system to access chemotherapy for treatment. The collective struggles of breast cancer patients generate new kinds of socialities and identities. These iterations are powerful in reorganizing

social life because they can create new place-based communities and support social movements (Shapiro and Kirksey 2017). In the instance of mountaintop removal in West Virginia, Berry (2012) describes the collective sociality between women working to fight against extractive industries in their communities in the face of waning jobs and the decline of human-environmental health. These two examples demonstrate how collective exposure to chemicals produces communities of suffering.

While communities of suffering are one example of chemosociality that explicitly focuses on negative relationships with chemicals, the shared experiences of pleasure induced by chemical experiences construct positive social and cultural forms of connection. Pine (2016) studies how the shared pleasure of recreational drug use creates communities among people who use drugs together. Research supports this common observance of increased sociability related to recreational psychedelic use, especially among people who use MDMA (ecstasy), MDA (sassafras), LSD (acid), and psilocybin (mushroom) (Bøhling 2017; Duff 2008). Relationships with chemicals can function as a regulatory mechanism for human relationships. In Faudree's (2020) research on a small community in Oaxaca, Mexico, that uses salvia (a psychotropic species of sage), the way community members talk about the plant regulates relationships with other community members and outsiders. Using community-based terminology to discuss salvia builds a social bond among community members while mediating outsiders in conversations. The community's relationship with the plant dictates social interactions with others and creates new chemosocialities. Assemblages can also create chemosocial relationships between human and non-human actors. For example, Kohn (2007) studies how the Runa of the Amazon use psychedelic drinks to communicate with their dogs and forest spirits. The assemblages between these human and non-human actors create chemosocial relationships between the Runa, their

dogs, and the forest spirits. These chemosocial relations dictate how these actors entangle and function in everyday life.

The application of chemosociality is diverse, and so is the use of chemoethnography to study it. Bargielski (2020) used chemoethnography to examine human-chemical relationships with environmental intoxicants at Superfund sites in Fields Brook, Ohio. Kirksey (2020) used chemoethnography to study the shifting social patterns of endangered frogs in the presence of industrial chemical byproducts in the Sydney Olympic Park in Australia. These two examples focus on human industrial histories, the relationships and processes between different species, and exposure to these industrial chemicals, which shape and create new forms of social meaning. Again, many of the recent uses of chemosociality emphasize the negative relationships between humans and chemicals. The use of chemoethnography to study the chemosociality of psychedelics presents a new avenue for observing constructive relationships between humans and chemicals.

Accounting for Chemicals in Ethnography

In applying ethnography to studying recreational psychedelic use, the focus is on the chemical relationships between humans and psychedelic substances or, essentially, the experience of psychedelic use. This examination requires adapting ethnographic practices to account for the role of chemicals in creating human experiences. For instance, Bargielski (2020) researches the chemical profile of uranium, chlorine, and titanium dioxide along with the human and environmental health effects. A chemosociality of psychedelics then requires studying the chemical construction and pharmacological processes and effects of psychedelics in the brain and the body.

A chemoethnographic practice also requires conceptualizing how chemicals are not only things but may be active agents used to create social relationships. Psychedelics may be agentive in this way because they generate subjective experiences when people intentionally consume them, which creates a different relationship than when exposed to the negative impacts of chemical agents. This perspective assumes chemicals are more than chemicals; they are strategies individuals use to pursue relationships, much like breast cancer patients receiving chemotherapy. Studying the use of chemicals as strategies requires studying chemical and human relationships in context to determine when chemicals are simply chemicals and when they are strategies. For example, Pine's (2016) research on recreational drug use highlights the practice of recreational use in creating community. It is an instance in which chemicals co-constitute with society and can be implemented as strategies to generate social cohesion. Similarly, the chemosociality of psychedelics can focus on the co-constitutive relationships between psychedelics and people to understand how social relationships form in specific settings and practices of use. Ultimately, chemosociality focuses on relationships between agents (including chemicals), contexts, and experiences. It also considers how people use chemicals as individual and contextual strategies.

Additionally, chemosociality expands beyond the human actors to consider additional non-human actors. For example, Kohn (2007) presents the framework of an anthropology of life, which is not restricted to only humans but is also interested in other kinds of living selves, such as dogs and forest spirits. It is also essential to consider the material and structural forces that entangle with human and non-human actors. For example, Tsing's (2015) investigation into matsutake mushrooms brings together human actors like traders and nature guides, with material actors, like forests, and structural forces like capitalism to understand their entanglements. For

the chemosociality of psychedelics, this means considering the contextual elements of psychedelic use, like the environment and mental state of people who use, as well as the political, social, and economic factors that shape experiences. In addition, it requires an examination of somatic entanglement or bodily entanglements, including the “social, suggestive, spatial, placebo, material, cultural, symbolic, and semiotic events” that impact experiences (Talin and Sanabria 2017:27). Identifying the actors and processes involved in the entanglements of human-psychedelic relationships is a practice of studying “matter in relation” (Abrahamsson 2015:13) to discover unknown relationships, interactions, and symbiotic processes within chemosocialities (Bargielski 2020; Tsing 2012).

Approaching a chemosociality of psychedelics using the framework of chemoethnography is essential to broadening the current conceptualizations around psychedelic use, which predominantly focus on the pharmacological effects and clinical benefits of psychedelics on the body. A chemosociality framework provides a way to examine the relationships between humans and psychedelics in a way that extends beyond the human body to encompass a more nuanced understanding of the non-human complexities of actors, entanglements, and intra-actions that result in new socialities. The current narrative around psychedelics and psychedelic research is predominantly the pharmacological narrative, meaning they are only considered useful in the context of medical use and are otherwise harmful. There is a long history of debating whether drugs are productive or harmful. For example, Alasuutari’s *Desire and Craving: A Cultural Theory of Alcoholism* (1992) examines two bars. One has more problematic alcohol use compared to the other. The comparison differentiates between problematic and non-problematic drinking. In contrast, works by Mary Douglas (2013), Robin Room (1984), and Dwight Heath (2012) study alcohol consumption by looking at contextual and

cultural influences and less at determining problematic consumption. This long-standing debate on how to approach substance use studies now informs views on psychedelics and psychedelic studies. For example, medical reductionism essentially devalues the human perspective and experience and reduces it to biological and physiological effects. Additionally, clinical research points to the increased risks for potential adverse effects in recreational use, like Hallucinogen Persisting Perception Disorder (HPPD), to argue for only the clinical use of psychedelics. To expand this perspective, I engage chemoethnography with complex elements of cultural entanglements. This framework helps examine human-chemical relationships within psychedelic experiences. Instead of following the historical debate of problematic versus productive substance use, this engagement of chemoethnography recognizes the possibility of positive and negative outcomes.

More-Than-Human Entanglements

Considering that the chemosociality of psychedelics calls for a perspective that encompasses more than just humans, it is necessary to identify frameworks that define human and non-human subjects. Posthumanism or multispecies ethnography are two theoretical frameworks that consider merging humans and non-humans into chemosocial entanglements.

The classic humanist perspective in anthropology focuses on the human as the most important subject of inquiry, ultimately supporting arguments for human agency and anthropocentrism (Smart 2011). However, Wolfe (2010) argues that anthropology cannot fully understand humans without reference to non-humans. A competing approach to humanism is posthumanism, which refers to the practice of decentering the human as the prime theoretical focus and reframing to consider the interspecies relationships around humans (Ogden et al. 2013;

Tsing 2012). Posthumanism “names the embodiment and embeddedness of the human being in not just its biological but also its technological world” (Wolfe 2010). Non-human actors can range from material and living organisms to beings and ideological ideations. Examples of potential actors include microorganisms, fungi, cells, molecules, atoms, dogs, bacteria, medicine, trees, mountains, rocks, oak pollen, waterfalls, plastic gloves, bottle caps, plants, birds, bees, and institutions like religion, government, and policy (Bennett 2010; Kirksey and Helmreich 2010; Ogden et al. 2013; Pendell 2005; Sheldrake 2021; Whyte et al. 2002). This means considering the material, historical, cultural, political, structural, and economic worlds.

Multispecies considers multiple organisms within a posthuman perspective, including plants, viruses, humans, and non-human animals (Ogden et al. 2013). This perspective allows for studying the “anthropology of life,” which situates “all-too-human worlds within a larger series of processes and relationships that exceed the human” (Kohn 2007:6). This notion of an “anthropology of life” aligns with Bateson’s (1972) ecology of the mind to consider the beyond-human context. It assumes recognizing how species beyond the human also engage in processes of seeing, representing, knowing, and thinking within the world (Kohn 2013). Faudree (2020) also argues the need to understand that as more-than-human species engage with humans, their status changes. As entities, they are not singular and stable but fluid and dynamic. Although multispecies is a relatively new buzzword in anthropology, it has roots in the foundations of the field with studies on human-animal relationships that stem from systems of classifying animals and nature. Topics of hunting, husbandry, and animals within ideas around totems and taboos from Evans-Pritchard, Douglas, Lévi-Strauss, Radcliffe-Brown, and Leach acted as an incubator for interests in human-animal relationships. Ultimately, these early works support the human-animal dichotomy, but nuanced perspectives of multispecies and posthumanism work to dissolve

the boundaries of that dichotomy. Bateson's (1972, 1979) work on human-dolphin communication was one such study that helped work to break down those classification boundaries between human and non-human studies. Latour (2005) brought much needed attention to the idea that social science limits itself "to humans and modern societies, forgetting that the domain of the social is much more extensive than that" (6), which informed future work to consider more-than-human actors. Recent multispecies work aims to disassemble the hierarchy between human and non-human selves. Eduardo Kohn (2007) studies cross-species communication between the Runa in the Amazon and their dogs. Donna Haraway (2008) presents the concept of companion species, where animals are more than sources of food or laboratory experiments but profoundly and complexly connect within human life and are essential to playing a role in the human experience.

It is unclear if posthumanism and multispecies anthropology are distinct ideologies within anthropology, and in many cases, they deeply entangle within each other. Whether separate or not, they both focus on more-than-human entanglements or lives that extend beyond humans. As Bargielski (2020) discusses, researchers must critically recognize how uniquely situated the terms posthuman and multispecies are within Western academic circles. To fully recognize the non-Western contributions of human and non-human relationships, from this point forward, I will address these frameworks as more-than-human entanglements.

Agentive Assumptions

Utilizing a more-than-human framework comes with assumptions about agency. Classic anthropological frameworks of humanism withhold agentic qualities for non-human entities, especially when not considering non-human entities within the scope of research. A more-than-

human framework can argue for limited differences in the amount of agency human and non-human actors have (Kipnis 2015). For example, it is common within psychedelic research and indigenous practices with plants and plant medicines for non-human lives to have agency (Kohn 2007; Miller et al. 2019; Sepie 2017). In some instances, this agency is literal where non-human objects act. For example, the Yolnu culture believes the sea has agency in how it acts and behaves (Sepie 2017). At the same time, other cultures ascribe agency to non-human actors, such as when the Runa engage in ceremonies of communicating with their dogs (Kohn 2007).

Intra-action, as defined by physics, provides the basis for the assumption that non-human actors have agency. Actors involved in the processes of intra-action have agency only through engaging in the process with other actors. It is unknown to which degree each actor grants agency to others or to which degree each actor can receive agentic qualities compared to other actors. Ascribing agentic status to actors also comes from three vital philosophical assumptions. First is hylozoism, or the idea that everything, human, species, or object, is alive (Sjöstedt-H 2015). Second, everything is alive because of panpsychism, where everything has some basic level of consciousness (Sjöstedt-H 2015). Third, if a non-human is assumed to be alive and has some level of consciousness, it can be presumed to have agency. This pathology centers on the human and defines agency based on consciousness. In one way, human and non-human actors in the chemosociality of psychedelics may have agentic qualities. The physiological impact of the psychedelic on an individual may be evidence of action by a psychedelic. At the same time, when someone consumes psychedelics, they can ascribe agency to the psychedelic through intra-action with it. In this case, the intra-action between humans and psychedelics co-constitutes the agency within and between them.

Kohn's (2013) research on the Amazonian Runa and their dogs provides one example of agentic entanglements that dissolve the boundaries between humans and non-humans. The Runa use psychedelic plant compounds to blur ontological boundaries and open communication with their dogs and forest spirits to perform everyday tasks like hunting. When crossing these boundaries, the Runa create unique connections with the broader non-human forest ecology. Other research examining the traditional practices of psychedelic plants found that practitioners report experiences of connecting and communicating with non-human entities, like plant intelligence, jaguars, snakes, supernatural beings, shamanic deities, animal powers, and distant places and landscapes (Harner 1973; McKenna 2005; Saniotis 2010). In the process of using psychedelic plant compounds, the Runa entangle with more-than-human actors that have agency.

Recreational drug use practices can also function within the same assumptions of more-than-human agentic actors. For example, studies conducted by Gilmore (2010), Luckman (2003), and Tramacchi (2000) found that drug use at music festivals in natural settings like deserts and bushland produced increased feelings and connections to nature and other people. Additionally, Kettner et al. (2019) support these findings with results that show extended exposure to nature and psychedelic use in nature increased measurable outcomes of nature connectedness. These studies reflect what Ogden et al. (2013) call the "hidden humanity of nature" or "the ways in which naturalized environments reverberate with cultural significance, acting as repositories of cultural memory, false memories, mythology, social identity, and as sites of production and reproduction" (12). Ogden et al. (2013) exemplify how people ascribe agency to non-human actors. The agency of nature comes from the cultural significance that people ascribe to it. Something missing from the literature is whether non-human actors can ascribe agency to humans or other non-human actors through entanglements with each other.

Through the practice of using psychedelics, humans can use them as strategies to reconfigure relationships with other actors, such as with nature. This concept of agency aligns with Ogden et al.'s (2013) article in that psychedelics become transformative agents when entangled with people. At the same time, if psychedelics are inherently agentive through their biological and physiological effects on the human body, they can create embodied experiences that connect people to other species and more-than-human things that produce and affect the quality of everyday life.

Becoming With More-Than-Human Entanglements

The first part of this paper focused on building the foundation of chemoethnography and chemosociality. Considering this framework is theoretical and abstract, it is challenging to apply it to case studies and my psychedelic research. To make these concepts more tangible, I use the second section of this chapter to explore classic theories in drug research. Beyond stating the literature, I update these classic theories by synthesizing them with chemosociality. I do this in three ways. First, I present the idea of becoming and then integrate it with practices of recreational drug use using Becker's (1953) classic *Becoming a Marijuana User*. Second, I review the classic literature on the drug, set, and setting and expand on it to include elements of culture by pulling from various literature on recreational psychedelic use. Finally, I present a renewed take on therapy and healing from the perspective of recreational drug use while covering literature on placebo response and pleasure.

What happens when humans and more-than-humans entangle? These interactions result in nonhierarchical, symbiotic attachments of new relations called becoming (Deleuze and Guattari 1987:241-242). This process is reciprocal and transformative, where all assemblages

become with and through each other (Haraway 2008; Heidegger 1971; Lowe 2020). An essential component of this process is that each agent does not transform independently. Assuming they transform independently reinforces the classic dichotomy between human and non-human or object and subject.

In contrast, the process and transformation of *becoming with* dissolves the boundaries between dichotomies and further supports the entanglement of these human and posthuman agents. *Becoming with* and transforming creates a new kind of cultural or social arrangement. In the posthuman and multispecies perspective, the process of *becoming with* between humans and non-humans means “beings are co-invented amid intra-actions” (Kirksey 2015:6). One way to conceive of this concept is Luhmann’s (2010) absorption hypothesis. When people become deeply entangled in processes of intra-action, they become completely absorbed. They *become with* the assemblages, entanglements, and actions. Some anthropological work connects the absorption hypothesis with engaging experiences or altered states of consciousness.

Luhmann (2010) used the absorption hypothesis to examine how people pray and talk to God to induce unordinary states of consciousness. Seligman (2005) studied how people became mediums in the Afro-Brazilian religion of Candomblé and how their state of mediumship stems from experiences of trauma. Trauma prepares individuals for experiencing transformative and altered states. Mediums *become with* their trauma experiences. Snodgrass (2023) looks at how people who play video games become absorbed in them. Over time their identities mesh with their avatars becoming real to them. This absorption into alternative identities and avatars does not result in a physiological change in the body as taking drugs does, but it is transformative for people. Stromberg (2009) covers similar concepts to Snodgrass by examining how people engage in play through entertainment, like books, games, and movies. By engaging in play,

people become absorbed in similar ways as altered states, such as pleasure, self-indulgence, and consumption. While these examples are not psychedelic experiences, they are similar in that they provide a general theory of how altered states work. These examples speak to how assemblages of entanglements *become with* each other in unordinary states, similar to those of transformation through psychedelic experiences.

In the processes of *becoming with*, the co-invention of assemblages and entanglements also create chemosocialities. In the context of healing, therapy management groups serve as examples of these chemosocialities that emerge from becoming. Janzen (1987) discusses these social groups as the people involved in treating someone with an illness or disease. Healthcare contexts often apply the concept of therapy management groups to humans involved in making health-related treatment decisions. However, this example is limited to only humans involved in the human experience of illness and disease. When combined with Whyte et al.'s (2002) concept of *materia medica*, we can uncover the chemosocial relationships within therapy management groups. *Materia medica* suggests viewing the objects of medicine as “things with social lives” (Whyte et al. 2002:3). Meaning the material objects of therapy, such as taking medicines and practices of use, are just as much of a social activity or strategy as engaging with human actors within medical treatment processes. This application of *materia medica* shows that more-than-human actors exist in therapy management groups. Understanding these relationships and entanglements helps uncover the processes of *becoming with* and chemosocial relationships through healing.

Becoming with Recreational Drugs

The application of Whyte et al.'s (2002) concept of *materia medica* to Janzen's (1987) therapy management groups is evident in recreational drug use practices as therapy too. Becker's (1953) *How to Become a Marijuana User* is a practical example of applying more-than-human agents and *becoming with* the emergence of therapy management groups. Before an individual becomes someone who uses drugs, they must learn how to use a drug, identify its effects, and evaluate if they like it. Janzen's (1987) concept of therapy management groups is essential to this process. First, people who use drugs must learn how to use a drug. They engage with social groups that function as therapy management networks to learn drug use practices. In the case of recreational psychedelic use at music festivals, campsites are the predominant places for many of these learning experiences (Dilkes-Frayne 2016). Social groups, traders, and dealers discuss drug use, including how much to take, when to take it, the best activities for coming up, what drugs to mix, and what drug combinations to avoid (Agro 2016). The recreational drug use community acts as a therapy management group to teach others how to use psychedelics.

The second step of learning how to use a drug is understanding its effects. This stage requires social networks to function as therapy management groups to teach the person what the drug effects feel and look like to identify if the drug is effective. The effectiveness of a drug relies on social efficacy. Social efficacy is the shared idea of drug effects, which provides a basis for evaluating whether the drugs are working. Social groups determine social efficacy through a shared set of standards and ideas about the use and effects of a drug or medicine (Whyte et al. 2002:31). Shared experiences can determine social efficacy within the social group or similar effects like shared sensory changes. Expecting certain sensations or effects, receiving them, and sharing them with others in the social group builds social efficacy and teaches people how to

recognize the effects of a drug. Determining a drug's social efficacy also generates the drug's sociality, where the consumer builds an expectation of the drug experience.

In the third stage, people who use drugs make meaning out of the drug experience and decide if they find it pleasurable. The social group helps mediate the necessary decisions to create a positive experience and increase the chance for a pleasurable outcome. The relationship initiated between the person using and the drug during the second stage is vital for determining their future relationship. Learning and experiencing affirmative sensations of a drug, as expected, can create a positive relationship between the person using it and the drug. Conversely, learning and experiencing undesirable sensations of a drug can negatively affect the relationship. Sometimes, a person using it might expect specific effects but receive none. In this case, they may contend they have no relationship with the drug (Whyte et al. 2002). Recognizing that these relationships also change and shape over time is valuable. For example, younger individuals who use psychedelics are often more interested in recreationally using them to experience pleasure. In contrast, older people who use psychedelics more commonly use them for personal growth (Zinberg 1984). This example shows how the social relationship to psychedelics can change over time. Change over time also brings changes in the therapy management groups, including changing the people they use with, the methods and practices of use, the measures of effectiveness, and the meaning and relationships of the experience to the person using. This recollection updates Becker's work by incorporating therapy management groups into intra-action as people build relationships when learning to use recreational drugs.

One of the limitations of Becker's study is that it does not consider the more-than-human agents in learning how to use a drug. The examination of recreational drug use purely focuses on human social relationships and ignores how different environments, drugs, and doses of drugs

impact human experiences. Even if the social relationships that emerge from human interactions with drugs are with other humans, the drugs are entangled in complex webs of human and non-human actors to create these relationships. As mentioned before, chemicals, in this case, recreational drugs, can act as mechanisms that people use to pursue relationships. Each stage of *Becoming a Marijuana User* contains human relationships with non-human actors, including chemicals, the physical environment, and structural forces that co-constitute the human and social experience of recreational drug use. Collins (2005) uses the idea of interaction ritual to describe how engaging in everyday activities establishes social lives and supports group membership. In the same way, the combined human and more-than-human elements and practices of recreational drug use merge to form and reinforce new and existing therapy management groups and chemosocial relationships. Thus, it is essential to recognize and study the role of drugs and other non-human actors to uncover the complex processes of *becoming with* in recreational drug use.

Set, Setting, Culture, and Practice

In drug research, set and setting is a conceptual framework that argues that these factors are highly influential in creating different drug experiences. Although early research mentions discussions on the context of drug use as instrumental to drug experiences, Timothy Leary, a controversial Harvard psychologist, was credited with coining the theory of set and setting in the 1960s (Leary 1961). Set means the psychological state of a person using a drug, such as personality, preparation, intention, expectation, cultural beliefs, mood, past drug use, mental health, and past trauma (Dobkin de Rios 1984; Haden et al. 2016; Hartogsohn 2017, 2020; Leary et al. 1963; Zinberg 1984). The setting is the physical, environmental, social, and cultural

contexts, such as the smells, lighting, decorations, pictures, location, and music of the experience (Carhart-Harris et al. 2016; Gasser et al. 2014; Griffiths et al. 2016; Haden et al. 2016; Hartogsohn 2016; Leary et al. 1964; Zinberg 1984). Research supports the role of contextual factors where a positive set and setting can create positive and even transformational experiences, whereas poorly constructed contexts can create challenging or harmful experiences (Carbonaro et al. 2016; Carhart-Harris et al. 2018; Haijen et al. 2018; Hartogsohn 2016, 2017; Kaelen et al. 2015, 2018; Leary et al. 1963). How contextual elements merge to effect experiences and outcomes are early conceptualizations of entanglements. In the same way, Becker (1953) considers an early version of becoming, and Bateson's (1972) ecology of mind is an early version of more-than-human contexts.

Additionally, Zinberg (1984) argues that the drug is a significant variable in context with the set and setting, and they shape drug use practices. The dose, type of drug, and pharmacological effects are variables that combine with other set and setting factors to create a diverse range of drug experiences. Mediano et al. (2020) studied stimulus manipulation while measuring neural signal diversity in patients taking LSD in a clinical setting. The study found that patients who closed their eyes during the experience had increased neural signal diversity compared to a placebo group. Additionally, the study found that the neural signal diversity is interrupted in patients taking LSD when watching a video, which suggests competition between external stimuli and LSD-induced imagery while the eyes are closed. Ultimately, this study supports that contextual factors play a crucial role in the outcome of psychedelic experiences.

Zinberg's addition of the drug to the set and setting framework is important for its time. His work hints at an attempt towards chemoethnography by integrating the psychedelic (chemical) into the narrative of the set and setting. At the same time, Zinberg falls short of

chemoethnography. His identification of the drug, along with the set and setting, speaks to the assemblages, the individual pieces of these human-chemical relationships. However, he does not move on from those assemblages to speak about how these elements of the drug, set, and setting entangle in complex relationships or the processes of intra-action that result in chemosociality. While Zinberg potentially was on the cusp of the early development of chemoethnography, his work is missing other critical elements of the framework. My development of the chemoethnography of psychedelics combines Zinberg's with other frameworks and classic bodies of literature to capture the missing elements of entanglement and intra-action.

Along with drug, set, and setting, culture is pertinent in shaping psychedelic experiences. Hartogsohn (2020) argues that there are two levels to set and setting. The first level is the individual set and setting, as already discussed. The individual level of set and setting sits on top of a more fundamental level of the collective set and setting configured by culture. The cultural construction of set and setting addresses how culture informs processes of meaning-making around experiencing altered states of consciousness. For example, Hartogsohn explains that a culture that elicits fear around psychedelics through media propaganda campaigns can create negative associations, such as being a bad person for seeking them out. In contrast, a culture that cherishes these experiences can provide tools and frameworks for the integration of these experiences. The power of cultural set and setting is evident in Anthony Wallace's (1959) research on cultural determinants of responses to mescaline experiences. White Americans in clinical trials had negative experiences with mescaline, including mood swings, aggressive behavior, and a loss of contact with reality. Whereas Native Americans using mescaline in traditional ceremonial practices had no mood swings and showed a higher sense of meaning and integration into their community. Wallace argued that the negative perception of hallucinogenic

experiences in the mainstream Western culture created adverse experiences for White Americans compared to Native Americans with positively integrated cultural perceptions of hallucinogenic experiences.

Although Hartogsohn (2020) argues for the cultural context in shaping psychedelic experiences, he also points out a paradox of set and setting. Stepping back from the individual and cultural contexts of drug use, he identifies universalities to psychedelic experiences. The first is intensity, meaning psychedelics can intensify things, including personal insights, sounds, relationships, and meaning. The second is hyperassociation. Psychedelics enhance the ability to make connections between things that otherwise are not visible. These connections can be through recognizing synchronicities, such as identifying what may seem like coincidences, as well as in the increased physical interconnectedness between regions of the brain that are otherwise less associated. Third, psychedelics promote boundary dissolution, which can allow for experiences of ego dissolution leading to mystical experiences and feelings of unity and connectedness. Despite the cultural differences that shape unique psychedelic experiences, intensity, hyperassociation, and boundary dissolution establish unified underpinnings of the psychedelic experience. Clinical research attempts to locate evidence of these universalities within the human body by attempting to quantify them, such as by measuring mystical experiences (Griffiths et al. 2006). While they may be grounded in biology, pharmacology, and neuroscience, people who use psychedelics still interpret these experiences through cultural and social constructions. Again, this emphasizes the importance of recognizing the role of culture in understanding psychedelic experiences.

Although drug, set, setting, and culture are essential elements in creating types of drug experiences, there is no one singular formula for creating the set and setting (Hartogsohn 2017).

Instead, the focus of drug, set, and setting in drug research should be to recognize that these variables constitute one of many entanglements that shape drug experiences.

Materiality

Materiality is a typology to examine the external sociocultural factors that create diverse psychedelic experiences. It provides a loose framework for understanding these complex webs of the drug, set, setting, culture, and practice on a micro and macro scale. Materiality examines the recursive relationship of how the material world shapes humans and human culture and, in return, how humans and human culture shape the material world. In relation to chemosociality, materiality resonates with the idea of entangled agential selves that *become with* each other in co-constitutive and recursive ways. Essentially, materiality aligns with the idea that “‘we’ are not outside observers of the world, nor are we simply located at a particular place *in* the world. Rather, we are part *of* the world in its ongoing intra-activity” (Barad 2003:828 emphasis original).

In Duff’s (2007) discussion of the embodied activities of drug use, he contextualizes space as the infrastructure, embodiment as the structure, and practice as the superstructure to understand how these activities create powerful and transformative effects through rituals, customs, and practices in local cultures and contexts. Harris’s (2001) classic approach to materiality has three tiers: infrastructure, structure, and superstructure. These tiers examine how human and non-human agents operate simultaneously. The infrastructure includes basic material needs and discusses how humans interact with the environment (Harris 2001). The structure incorporates economic, political, social, and cultural inscriptions that generate social identities, such as race, class, gender, and socioeconomic status (Harris 2001). Finally, the superstructure is

ideology and symbolism carried out through practice (Harris 2001). These tiers are more entangled than the theory suggests, but it provides a useful analytical tool. Synthesizing Harris' (2001) materialism with Duff's application of the theory, I envision space as the setting, embodiment as the set, and practice as the entanglement of the set and setting.

Space as Setting

Space is the material objects needed for basic human needs and a function of how humans interact with the environment. In Duff's (2007) research, space as a function of infrastructure is a way for people to make sense of the world from relations between humans, physical objects, memories, events, and experiences. Scenes are another concept to consider when constructing space. Moore (2004) argues that individuals create scenes by interacting, practicing, and participating within them. Scenes are dynamic and diverse, meaning that when the setting or practices change, so does the scene. Cultural materialism is the interaction between humans and the physical world and assumes human behavior is part of nature and the physical world. This means the two actors, humans and the world, can influence and dictate each other (Harris 2001). In recreational drug use, space is the physical and material characteristics surrounding drug use and includes how people move through these spaces, how these spaces are regulated, and what routines determine distinctions within the space (Duff 2007). As Moore (2004) suggests, as the regulations around and routines within the space change, so do the scenes. This study defines space as the individual-level setting or the immediate and tangible surrounding environment.

Set and setting can vary between practices of psychedelic use, including clinical, indigenous, and recreational music settings. Dumit and Sanabria (2022) argue that the clinical

setting aims to discover a “magic bullet” for addressing health ailments by strictly controlling environmental factors. This “magic bullet” of clinical research is to coalesce the perfect entanglements of contextual set and setting factors to minimize harm and maximize therapeutic potential using a predetermined formula. The Multidisciplinary Association for Psychedelic Studies (MAPS) protocol for MDMA-assisted psychotherapy details every aspect of the process, from requirements for therapist training, preparation of the physical setting, rules for somatic touch, preparatory sessions, screening procedures, key points during the session, integrative follow-up sessions, and integrating therapy models (Mithoefer 2015). This protocol defines the setting in a way that shapes the materiality and process of the experience. Changing anything within the protocol changes the setting and, thus, the process. There are similarities between the clinical setup and indigenous and recreational practices. However, ultimately the non-clinical settings are more flexible and allow for the experience to manifest within itself compared to enacting predetermined protocols and controls of outside factors. In traditional indigenous practices of psychedelic use, there is an emphasis on setting clear intentions and approaching the experience with an open attitude (Tupper and Labate 2014). Preparation and intention for recreational use may look different from indigenous practices with rituals of cleaning, meditation, listening to music, burning incense, or using cannabis (Hartogsohn 2016). The setting of indigenous psychedelic use often involves ceremonies, rituals, and songs (Dobkin de Rios 1984; Harner 1990; Loizaga-Velder and Verres 2014; Lörler 1989; Nettle 1956). The setting for the recreational use of psychedelics at music events includes flashing lights, lasers, dancing, repetitive percussion, and music (Dilkes-Frayne 2016; Duff 2007). When considering chemoethnography and the entanglements of context, each setting affords unique contextual elements and thus experiences of ego dissolution, transformation, and meaning. While each

setting is different, these factors share roles in how they shape and create psychedelic experiences. The setting is vital to other layers of materiality in that it influences the behavior and practice of drug use and experiences where “one can acquire a new socially informed body” (Dudek 2022:9).

Embodiment as Set

Embodiment is different from space because it conceptualizes the set on a micro and macro level. On a micro-scale, the embodiment is the idea that the internal physiological effects of psychedelics, the psychological state, and processes of subjective meaning-making impact experiences. On a macro scale, the embodiment is the idea that structural forces outside the individual or physical realm of the body create identities and ways of being and perceiving the world (Grosz 1994). These structural forces can be political, cultural, and economic entities that create identities around race, sex, gender, class, age, political status, and socioeconomic status (Kirksey and Helmreich 2010). Similar to Hartogsohn (2020), where the cultural framework is the basis of the individual set and setting, the macro set (structural forces) is instrumental in establishing the micro set (embodied identities). This relationship is recursive in that individual mindsets, interpretations, and experiences influence social and cultural institutions. At the same time, social and cultural institutions influence those mindsets, interpretations, and experiences that one lives and experiences in. Wallace’s (1959) study comparing White American and Native American experiences on mescaline exemplifies how cultural frameworks shape perceptions of an experience. This relationship is possible because of how the material world influences and shapes actors while simultaneously being shaped and influenced by these actors. Moreover, this reciprocal relationship is plausible because embodiment dissolves the boundaries between the

subject and the object (Deleuze and Guattari 1980), which relates to the co-constitutive nature of chemosociality.

Not all drug studies include structural forces as an influential factor in human experience. Recognizing and including this element in drug research is vital to understanding how embodiment creates nuanced drug experiences (Desjarlais 1994). Scheper-Hughes and Lock (1987) identify three forms of embodiment: subjective, social, and political. The subjective body is the individual lived experience composed of both the mind and body. In recreational psychedelic experiences, this is the combination of the physiological experience with the psychological process of meaning-making to result in the subjective experience. The social body is how the body functions “as a microcosm of the universe” (21). Specifically, this representation can mean the body reflects physical, social, or cultural environments. The social body of recreational psychedelic experiences relates to Hartogsohn’s (2020) cultural construction of the set and how it influences meaning-making processes. On one level, embodied culture influences the subjective psychedelic experience. The political body represents regulation, power, and control over behavior. In recreational psychedelic use, this can be the illegality of these substances, which can result in adulterated and harmful substances that control the use and practices of these substances. It can also be the accessibility to harm reduction services which reinstates power and control over drug use practices to an individual.

Medical pluralism considers how structural forces create different sociopolitical and cultural contexts that create specific forms of medicine and experiences with medicine (Kleinman 1997). As discussed by medical pluralism, structural forces influence unique and individual drug experiences in similar ways. For example, Netherland and Hansen (2016) examine the “white problem” of the prescription opioid epidemic. The solution to the opioid

epidemic includes institutionalized medical treatment because society views this epidemic as a White issue. On the other hand, drugs associated with Black Americans, like crack, are met with increased legal punishments. The ascription of identity characteristics from structural forces creates identities, social realities, and lived experiences. As structures of social organization, such as drug laws, are imposed, individual identities are shaped and embodied within the individual.

Although there is little discussion on the influence of structural entities on the embodiment of identity in recreational psychedelic studies, Agro (2016) discusses the role of socioeconomic status on the privilege provided to ravers in the music scene. Because of the middle-class socioeconomic status of ravers, this population of people who recreationally use drugs can ignore drug laws with little consideration of social or economic consequences. Other people who use drugs, like street addicts, may be of low socioeconomic standing and come in constant contact with law enforcement making them more likely to be persecuted for drug use than ravers. The embodiment of class, race, and socioeconomic status provides privileged recreational drug use for some people who use while oppressing others, creating various lived drug experiences.

Practice as an Entanglement of Set and Setting

Practice is what bodies do in the application of ideology and symbology. Foucault (1988) calls these practices “technologies of the self,” which are actions performed by people as a means of transforming themselves into desired states of being, like pleasure or happiness (18). These “technologies of the self” are born from the other two levels of materiality, meaning set and setting shape the ideologies and symbology that enact practice. Physiological drug effects,

structural forces, individual psychologies, and the physical environment shape individuals and their experiences, creating the kinds of practices an individual performs. Practice occurs in the behavioral environment where set and setting merge (Dudek 2022). How people engage in drug use is entangled with the set and setting they find themselves in. For example, Dudek studied how Westerners traveling to participate in traditional Shamanic ayahuasca rituals experienced changes in perceptions around shamans and their practices. Prior to attending the ceremonies, Westerners had positive attitudes about shamans. Once they arrived, their experiences challenged their expectations surrounding traditional shamanism and ayahuasca practices causing their ideas around them to become negative. This shift in thought perceptions of the shaman changed how they interacted with them in the ceremony and the meaning they ascribed to their experience. This example shows how changes in the environment (setting) and perceptions (set) entangle with practice and meaning-making in an experience.

In the context of drug use, practice examines the actual engagement of the individual with drugs and other human and more-than-human actors and contexts of the drug experience. These practices include the activities performed while people are high, practices and techniques for using drugs, and the meanings and significance of drug use (Duff 2007). Duff (2007) argues that social contexts create different meanings and values of drug use behavior in a broad conceptualization of drug use. Zinberg (1984) would agree with this but expands on this idea by identifying three concepts that explain how and why social contexts create different experiences. First, social sanctions are the “values and rules of conduct” for drug use or social agreement on how drugs should be used (5). Second, social rituals are the “patterns of behavior” of drug use, like how to get the drug and where to use it (5). Third, social controls are the assemblage of

social sanctions and rituals in the physical practice of drug use in all social settings (6). Social practices of drug use create drug experiences.

Social sanctions of recreational psychedelic use can include having someone around for help during the experience, planning the trip's activities and timeline, and creating a comfortable set and setting (Zinberg 1984). In recreational psychedelic use, the combination of social sanctions and rituals often focuses on making the drug use and experience safe through things like creating a plan for use, never using in a strange place or with strangers, and cleaning up space before use (Zinberg 1984). Sharing, engaging, and mediating drug use among social groups at music events is an example of social sanctions. These practices include knowing what dose to take for the desired effect, knowing the dose and drug taken, spacing out doses through the event, ensuring friends know what drugs are taken by whom, staying hydrated and well-fed, and getting adequate sleep (Agro 2016:74). In applying the framework of materiality to this study, I can explore the entanglements of the set and setting in the relationships and practices that unfold in recreational drug use.

Therapeutic Assemblages

As human, more-than-human, drug, set, setting, practice, and various other assemblages entangle, an infinite possibility of outcomes emerge. One avenue of discussion on the outcomes of drug use is therapy and healing. Pharmaceutical research is commonly associated with therapeutic outcomes and increases in health and well-being, but this is possible for non-pharmaceutical drug use, including psychedelic use. A range of psychedelic research finds the benefits of use include increased well-being, quality of life, openness, connections to oneself and others, mindfulness, and changes to personality, mental health, political perspective, lifestyle

preferences, and nature connectedness (Argento et al. 2017; Bogenschutz et al. 2015; Carhart-Harris et al. 2017, 2018b; Davis et al. 2021; Erritoze et al. 2018; Forstmann and Sagioglou 2017, 2021; Gasser et al. 2015; Griffiths et al. 2006, 2008; Haijen et al. 2018; Hendricks et al. 2015; Johnson et al. 2014; Kettner et al. 2019; Lebedev et al. 2016; Lyons and Carhart-Harris 2018; MacLean et al. 2011; Madsen et al. 2020; Moreno et al. 2006; Nour et al. 2017; Osório et al. 2015; Ross et al. 2016; Soler et al. 2016; Watts et al. 2017). Outside of formal research studies, there are countless subjective accounts of the therapeutic effects of psychedelics, including Bill Wilson, who used the belladonna treatment of deadly nightshade to treat alcoholism. During his experience, he envisioned alcoholics around the world holding hands and supporting each other, which sparked his idea to found Alcoholics Anonymous (Macbride 2022). He later took LSD, which successfully treated his depression. This section reviews key components of the therapeutic discussion, including the role of placebo and symbolic healing, therapeutic pleasure, context considerations, and the mechanisms of therapeutic drug use.

Symbolic Healing through Placebo Response

Clinical trials use placebos as a control variable for studying the efficacy of pharmaceuticals. One test group in a study receives an active dose of the pharmaceutical, and a second one receives an inactive dose, a placebo. The goal is to measure if the group receiving the inactive dose has a statistically significant treatment response compared to the active group. Moerman and Jonas (2002) argue the flawed nature of clinical studies because such studies assume that placebos can affect patients when placebos cannot have any effect. Instead, patients may have a placebo response, meaning patients in clinical trials experience statistically significant improvements when given a placebo because the therapeutic setting can cue

endogenous processes that enact therapeutic outcomes (Walach 2015). A key concept of placebo response is that the placebo does not do anything, but the context of being in a therapeutic setting does. This idea aligns with “meaning response,” which again suggests placebos do not actively do anything, but the meaning ascribed to them does (Moerman and Jonas 2002:472). The outcome of a meaning response can be positive or negative, “meaning response elicited after the use of inert or sham treatment can be called the ‘placebo effects’ when they are desirable and the ‘nocebo effect’ when they are undesirable.” (Moerman and Jonas 2002:472).

The placebo effect or meaning response extends outside clinical settings to other therapeutic experiences. Cultural contexts elicit meaning responses, such as Phillips et al.’s (1993) research on Chinese Americans' life spans and cultural meanings of birth years. In Chinese medical theory, individuals born in “Earth years” are considered more susceptible to diseases. When comparing Chinese Americans with the same diseases, those born in Earth years have a shorter life expectancy of 59.7 years compared to 63.6 years. The cultural constructs around health and disease in Chinese medicine create a meaning response that results in lower life expectancy based on the meaning of a birth year. Franz Boas makes a similar argument related to the power of initiating healing. When studying The Religion of the Kwakiutl Indians, Boas (1930) found performance practices by shamans, like sucking the disease from a person, held the symbolic power to heal someone and make them feel better. Knowingly going into a healing experience can increase the ability to initiate healing. This phenomenon is evident in Haijen et al.’s (2018) research on people who used psychedelics in naturalistic settings. Setting an intention to connect with nature or have a spiritual or therapeutic experience predicted having one compared to participants who did not set an intention prior to the experience. Also, participants with an intention reported greater overall well-being after the experience than

participants without an intention. The symbolic power of healing in placebo and meaning responses indicate the power of ascribing agency and social lives to medicines. When someone believes in the power of medicine, it can initiate a relationship and response with it.

Social support groups have a role to play in the symbolic, placebo, or meaning response. Moerman and Jonas (2002) suggest there may be potential for the body to initiate healing when a friend, relative, or healer provides social support in the treatment process. For example, having a religious leader say a prayer over someone or a family member expressing hope in recovering from an illness may create a placebo or meaning response resulting in positive therapeutic outcomes. Ultimately, a placebo has no agency in providing or initiating therapeutic outcomes. However, the meaning ascribed to the healing process may have the potential to generate a symbolic or meaningful response.

Therapeutic Pleasure

Most literature on therapy and healing does not recognize the role of pleasure in the process. The literature discusses pleasure related to the body when it does discuss it. As described by Coveney and Bunton (2003), the current discussion around the body views it as an ordered body with priority towards the logical and rational head compared to the lower body, which is disorderly and connected to sensual pleasures. Therefore, things that provide pleasure, such as illegal drugs, are associated with the lower body and threaten the ordered, rational body. Because illegal drugs are associated with pleasure, they are not considered therapeutic. In contrast, pharmaceuticals, which are not determined pleasurable and do not pose a risk to the rational upper body, are accepted as therapeutic and used for healing. Academics and researchers

who find it precarious to write about pleasure perpetuate the practice of avoiding it in literature (Moore 2008).

Michael Foucault (1986) and Ruth Barthes (1975) describe pleasure in terms of “jouissance,” meaning enjoyment and ecstasy. Specifically, Foucault understood pleasure as an event that allowed an individual to maintain a sense of themselves while experiencing joy through the senses. Pleasure as an event provides an alternative narrative to current literature that sees pleasure as hedonistic. Instead, pleasure can be therapeutic. Pleasure can result in purposeless play, where individuals disobey the rules and boundaries of everyday life (Watts 1962). This pleasurable play is a source of “calculated hedonism” or “controlled loss of control” that allows an individual to remove the boundaries of work and responsibilities without disregarding them (Measham 2004:321-322). This description of pleasure as “calculated hedonism” still relies on the negative connotation of engaging in an event that threatens the rational body. Instead, purposeless play may be productive (Parsons 2022). Drug use at music festivals is an example of pleasurable play where individuals separate from everyday responsibilities. Individuals can engage in pleasure and refresh and reprocess responsibilities before rejoining society. Pleasurable experiences are also reiterative in that by participating in them, an individual learns to identify and experience specific affects or feelings and moderate them to achieve desired effects (Race 2008:420). The next chapter examines pleasure in recreational psychedelic use more deeply.

Therapeutic pleasure is not inherent in experiences and events but is contingent on context. Moore (2008) defines drug-related pleasure as a “desirable bodily experience arising from the interaction of pharmacology, subjectivity, culture and history, while, at the same time, acknowledging the difficulty, perhaps even the impossibility of constructing an analytical

discursive account of such corporeal experience” (354). Understanding pleasure and how it functions in drug use and the potential for therapy and healing requires understanding the assemblages and entanglements of contextual elements within pleasurable events.

Context of Therapy and Healing

Brouwer and Carhart-Harris (2021) suggest the term biopsychosocial when considering therapeutic contexts, which means to “recognize how social, psychological and biological factors interact in bidirectional, synergistic ways to determine health and illness” (322). In relation to drug use and psychedelic experiences, this requires looking at “collective, intersubjective activity” in combination with contextual factors of preparedness, intentions, expectations, interpersonal trust, therapeutic alliance, community support, and integration (Brouwer and Carhart-Harris 2021; Kettner et al. 2021:11). Exploring the context of drug use is fundamental for considering the potential for productive and therapeutic outcomes (Parsons 2022).

Socialization is an essential element of health, wellness, and treatment, as previously discussed with therapy management groups. Brosterhus (2022) presents the idea of conversations of caring. These conversations involve discussing illness and potential treatment options like using pharmaceuticals. They are also crucial for normalizing illness, considering individuals are marginalized from society while they are sick until they are healthy again. These conversations serve to integrate unwell individuals into society so they can gain social support in their treatment journey. Brosterhus (2022) argues that conversations of care function as ritual social acts where individuals socialize to address illness issues through treatment rituals. In psychedelic experiences, social connectedness functions as a conversation of care. Social connectedness can increase well-being as it is considered a determinant of mental and physical health (Alexander

2010; Hari 2019; Kettner et al. 2021). Social connectedness can look like sharing intentions, thoughts, feelings, and experiences to build relationships and trust within the community in a psychedelic space (Aronovich 2020; Derlega and Chaikin 1977; Kettner et al. 2021).

Socialization is a process of intra-action. As described within the processes of *becoming with*, engaging in these activities to enhance social connectedness or interaction rituals, as Collins (2005) would describe, creates social groups that support health and wellness. In researching psychedelic use in naturalistic settings, Kettner et al. (2021) found that perceived emotional support during psychedelic experiences predicted social connectedness. As a result, individuals gained more accepting attitudes toward others with different opinions, beliefs, and practices, which suggests that psychedelic experiences in group settings may contribute to therapeutic outcomes. Additionally, Forstmann et al. (2020) studied multi-day gatherings in the United Kingdom and the United States. They found that psychedelic use positively predicted self-reported transformative experiences related to social connectedness and increases in mood. These findings show the role of sociality as a process of intra-action by creating supportive social environments and enhancing long-term well-being during and after the experience.

People also form relationships with medicines while seeking treatment. Van der Geest et al. (1996) presents the idea of the social life of pharmaceuticals through self-medication (164). Self-medication is “the use of medicine on one’s own initiative, without consulting a doctor for the problem in question, whether the medicine is already in one’s possession or whether one procures it to this end (in a pharmacy or from another person)” (Sylvie Fainzang 2013:494 as quoted by Brosterhus 2022). In self-medication, people have the agency to self-medicate and treat themselves. Conversations with others are essential in diagnosing an illness and deciding to self-medicate and how to self-medicate, making it a social action like conversations of care. Self-

medication opposes biomedicine which functions on generalizing and objectifying the body, taking away autonomy (Brosterhus 2022). While people self-medicate with pharmaceuticals, people can also “make medicine.” To “make medicine” means socially engaging with a medicine, substance, plant, or psychotropic through practices that confer medical benefits (Faudree 2020:584). In essence, people can generate therapeutic practices that matter to them by engaging with medicines in different ways, and that engagement is a social action with the medicine. For example, self-medication can be about treating a specific mental health problem or enhancing functionality in everyday life. Lende et al. (2007) found that people who heavily used methamphetamine did so to feel better and function better, such as increased productivity. Ultimately, the purpose of self-medication is diverse and can include treating a defined illness or personal enhancement.

Environmental context is vital to therapeutic outcomes in the same way that the setting is essential to the outcome of a psychedelic experience. Creating the ideal environment for psychedelic-assisted psychotherapy by setting up a comfortable and pleasing environment, establishing intentions, and practicing integration, can ensure the safety and effectiveness of the treatment (Brouwer and Carhart-Harris 2021). Sepeda et al. (2020) argue a similar point where structured environments can result in positive benefits from the experience compared to unstructured environments. Kettner et al. (2021) found that plant medicine ceremonies with organized and guided experiences could lead to beneficial, long-lasting psychological changes. A structured, organized, or controlled environment is diverse and can include settings outside of clinical studies, such as ceremonies and naturalistic settings. The idea is to recognize how the environment, along with social contexts with other people and psychedelic medicines, increase the potential for long-term change and benefit. Other contextual factors to consider are the

pharmacological effects of the substances, internal frameworks that influence how someone processes experiences (social, cultural, political), the context of community and socialization and how they also function as intra-actions, and how these elements entangle before, during, and after an experience.

Therapeutic Drug Use

How do psychedelic experiences facilitate the potential for therapeutic healing? Moerman and Jonas (2002) argue that healing comes from the meaning of the treatment. Brouwer and Carhart-Harris (2021) provide an ethnopsychology model of change that defines the meaning of treatment. Brouwer and Carhart-Harris (2021) suggest pivotal mental states (PiMS), which are “intense hyper-plastic mind and brain states, with exceptional potential for mediating psychological transformation” (320). Psychological transformations are changes in “perception, cognition and action or behavior” (139), which can look like “major recalibrations to fundamental beliefs or outlooks” (334). In PiMS research, Brouwer and Carhart-Harris (2021) hypothesize that moments of extreme psychological crisis can create situations for potentially long-lasting psychological change toward illness or wellness (319). Essentially, pivotal mental states are a process that can occur from impactful experiences that result in changes in thoughts, actions, or behaviors. Stress is a psychological crisis perceived as positive or negative. Positive stress, like a mystical experience, can result in a greater likelihood of a positive outcome. In contrast, negative stress, like childhood trauma, can increase the likelihood of a negative outcome. It is important to recognize that positive and negative outcomes are not exclusive. Additionally, psychedelics are not the only initiator of PiMS. Others include Holotropic

breathwork, binaural sounds, and meditation. As mentioned in the previous section, context is essential to the experience and outcome of PiMS.

Narratives about the self are essential to PiMS and the therapeutic process. Narrative self-functioning is the framework that creates stories and beliefs about ourselves and impacts our concept of who we are and who we want to be (Amada et al. 2020, 2022; Gallagher 2013; Letheby 2017). The opposing narrative is maladaptive narrative functions which are “defensive, avoidant, anxious patterns of thought and behavior” that limit the ability to achieve higher states of well-being (Amada and Shane 2022:3). Being able to exchange maladaptive narrative functions for narrative self-functioning is essential for improving well-being. These narratives are similar to the meanings ascribed to treatment, as discussed by Moerman and Jonas (2002). Giving meaning to adaptive self-narratives is equivalent to ascribing effective therapy and healing, whereas giving meaning to maladaptive narratives is equivalent to ascribing ineffective therapy and healing. Learning and unlearning during PiMS can establish opportunities to rewrite self-narratives and one’s perspective of themselves. The psychedelic experience is one way to change self-narratives along with perspectives of others and the world, which can improve health and wellness (Brouwer and Carhart-Harris 2021; Carhart-Harris and Friston 2019; Hinton and Kimayer 2017). A negative or positive health and wellness outcome is contingent on changing from productive narratives to maladaptive narratives or vice versa. Shifting narratives occurs through self-transcendence, such as ego dissolution or a mystical experience. Ego dissolution and mystical experiences are the dissolving of the self or the individual ego. As a result, individual identity is lost, which merges into a greater whole, a cosmic universal oneness (Griffiths et al. 2008). Brouwer and Carhart-Harris (2021) argue that losing oneself is an essential part of the transformation process in stripping oneself of a set of narratives to rewrite a new set of

narratives. Psychedelics can initiate ego dissolution, making them a tool for rewriting narratives of the self. Additionally, ascribing the potential to create specific experiences, such as by setting an intention, can create a meaning response.

Within PiMS and experiences of ego dissolution, certain things happen with emotions and memories that are vital to health and well-being. These experiences allow patients to “address rather than suppress or side-step aversive memories and emotions” (Carhart-Harris and Goodwin 2017:3 as quoted by Bøhling 2017:134), which gives them space to access previously inaccessible emotions and memories and initiate therapeutic intervention (Grof 2008). In becoming aware of suppressed emotions and memories, individuals gain awareness and self-insight to understand them within the context of thoughts, feelings, and beliefs (Stein and Grant 2014). This awareness allows them to remember values and deeply feel beliefs and emotions (Alamia et al. 2020; Belser et al. 2017; Brouwer and Carhart-Harris 2021; Carhart-Harris et al. 2014). The overall emotional nature of PiMS is critical to the experience. A positive emotional nature can alleviate negative beliefs and narratives compared to a negative nature which can reiterate negative beliefs and narratives. These associations are not exclusive; there are exceptions, and context, like personal meaning, is an important consideration in the outcome of such experiences.

Another factor in the outcome of PiMS is integration. Integration is the process where people make meaning of their experience after it ends (Hartogsohn 2017; Richards 2019). Integration can increase the potential for recognizing self-insight from a PiMS experience. For example, Amada and Shane (2022) found that integration after a psychedelic experience can improve knowledge of oneself and personal development, which can promote well-being. In their study, the two most common integration techniques were “reflecting on certain aspects of

the experience that were important to me” and “spending time in nature” (Amada and Shane 2022:17).

Examining the PiMS framework, ego dissolution initiated by psychedelic experiences has the potential to rewrite narratives about the self and contribute to changes in health and well-being. At the same time, part of rewriting those narratives comes from giving meaning to those narratives and the agency to change them through meaning response. Context of the experience is essential to creating different emotional moods and experiences, while integration is vital for processing the experience and making meaning which contributes to further insight and potential for narrative, thought, and behavioral changes. In studying the chemoethnography of psychedelics, this model can provide one framework for examining transformative processes. It can identify shifts in self-narratives and experiences of ego dissolution that help illuminate meaningful change for participants from psychedelic experiences.

While PiMS is a tangible framework for examining transformative experiences, it has limitations. One shortcoming is how it conceptualizes the therapeutic healing of psychedelics from a Western perspective using the ethnopsychology of change. Essentially, PiMS claims a cultural perspective on understanding healing. In one way, it expands on clinical frameworks by considering internal and external cultural elements like environment and trauma influencing the therapeutic process. However, it relies on a strict Western conceptualization of this process using terms and ideas like awareness, ego, and repression. Other non-Western perspectives and cultures have different understandings of the self and how psychedelics facilitate change. Along with these other cultural frameworks come other ways of ascribing meaning response to an experience and its outcomes.

Summary

The chemosociality of psychedelics entangles a diverse set of thoughts and ideas from fields ranging from anthropology and sociology to physics and philosophy. It proposes using the method of chemoethnography to study chemosociality, meaning examining intricate life experiences between humans and chemicals to understand new social meanings. It requires an assumption of dynamic collisions of assemblages, entanglements, and processes of intra-action where humans amalgamate with psychedelic chemicals in reiterative and recursive ways. Beyond just chemical relationships, the chemosociality of psychedelics steps beyond anthropocentric examinations of human-centered relationships to consider the recursive processes of *becoming with* more-than-human entities. This examination places psychedelics at the center of inquiry, where people assign them agency and perceive them as tools, mechanisms, and processes within themselves to create new social formations and regulations.

Further, I synthesize chemoethnography and chemosociality with classic literature on drug research. I use Becker's (1953) work to discuss *becoming with* psychedelics and therapy management groups as they form social lives through intra-action. It is essential to study practice within context to uncover the complex processes of *becoming with* in recreational psychedelic use. I frame Zinberg's drug, set, and setting as a foundation on what entanglements to look for in a chemoethnography of psychedelics. I also use this framework to bring serious attention to the context of psychedelic use and the role of culture in experiences. The potential for therapeutic outcomes and healing is within the processes of *becoming with* chemicals and contextual elements of the psychedelic experience. I expand on foundational pieces of therapy and healing to consider the roles of symbolic healing and pleasure. These transformative processes can

emerge a new self, constructed of narratives that shape thoughts, behavior, and action, which are new social narratives with oneself, others, and psychedelics.

Some drug and alcohol research focuses on the duality of problematic and non-problematic drug use (Hunt and Barker 2001). Agro (2016) argues that discussions on drug use are more productive when focusing on the intention and context of drug use. This requires studying drug use in practice to understand how drugs interact with the body, community, mind, and environment. The chemoethnography of psychedelics provides a framework for identifying the elements that merge in dynamic dances to create exceptional psychedelic experiences. This framework assists in studying recreational psychedelic use in three ways.

First, the chemosociality of psychedelics assumes chemicals are strategies individuals use to pursue relationships with themselves and others. This assumes the ascribed agentive nature of psychedelics, and by studying their entanglements with humans and contextual elements, we can document the actions that give rise to human-chemical relationships.

Second, examining the context of psychedelic use extends beyond clinical studies to understand multiple layers of assemblages that entangle to create meaningful psychedelic experiences. This holistic perspective is essential because “the effects of drugs cannot be fixed to neither their chemical capacities nor the pharmacological workings of the brain,” meaning context shapes experiences of consumption (Bøhling 2017:135). Studying the assemblages of recreational psychedelic use in context provides insight into the extra-pharmacological factors that construct psychedelic experiences.

Third, studying the assemblages of actors and forces in recreational psychedelic use illuminates the therapeutic and transformational potential and mechanisms of chemicals. Considering the effects of meaning response and pleasure in psychedelic experiences illuminates

new ways of conceptualizing human-chemical relationships. This project expands the horizons of chemoethnography and chemosociality beyond environmental toxins by connecting it to recreational and therapeutic psychedelic use.

CHAPTER 3:

A SOCIO-CULTURAL EXAMINATION OF US DRUG POLICY AND RESEARCH

Introduction

Musto (1999) argues that waves of acceptance and intolerance fill the history of drug policy and use. Examination of the political and social trends around drugs internationally and in the United States (US) starting in the late 1800s up to recent legislation reveals these fluctuating periods. The academic, medicinal, and social inquiries about drugs entangle with drug policy patterns. Restrictive government policies targeted narcotics in the 1800s and early 1900s, making doctors and pharmacists leery in prescribing them to patients. The discovery of psychedelic substances in the 1950s and 1960s increased research into their potential for diagnosing and treating mental illness. As they became more prevalent in mainstream America, the narratives around recreational psychedelics shifted to illicit fear around them, resulting in reinstating restrictive drug laws. The penalization of drug use continued for decades through the 1970s, 80s, and 90s, forcing drug research underground. However, in the last 15 years, there has been a resurgence of clinical studies focused on the therapeutic effects of psychedelics. This renewed interest brings a new wave of drug policy focused on decriminalization, medicalization, and legalization, along with conversations about other types of psychedelic use, such as Indigenous and recreational.

The following chapter establishes a timeline of key historical, political, and social moments over the last 120 years that built a foundation for the reemergence of psychedelics in

the US. Considering it is impossible to detangle psychedelics from discussions regarding all drugs, this review attempts to provide a holistic perspective on drug use practices and policies. However, when relevant, I provide specific discussions on psychedelics. The first section traces the historical political timeline of international and US drug policy from the late 1800s to the 1950s. The second section reviews early psychedelic discoveries from the 1940s to the 1970s. The third section critically examines significant legislative developments in establishing the War on Drugs and discusses the socio-cultural implications of these policies. The fourth section covers the recent trends in psychedelic studies on the therapeutic effects from the clinical, Indigenous, and recreational perspectives. Finally, the fifth section features recent trends in drug policy with a discussion on decriminalization, medicalization, and legalization of drugs and their social effects.

Early Drug Legislation in the United States and The Global Influence on Drug Control Policies

Historically, opium and other narcotics were common medicines promoted as cures for many ailments, even as far back as the Middle Ages. Cocaine was an antidote for hay fever and a staple ingredient in Coca-Cola. Opium, heroin, and morphine were also part of everyday American life and, in some cases, supplied by pharmacists. Social attitudes towards narcotics shifted in the late 1800s and early 1900s as narratives around addiction and abuse surfaced. Professional organizations like the American Pharmaceutical Association (APhA) and the American Medical Association (AMA) were concerned with the non-medical use of drugs and chastised self-medication. These organizations were instrumental in shaping and enacting early drug policy to protect citizens from habit-forming drugs.

Additionally, in the late 1800s American culture associated Chinese immigrants with smoking opium and Southern Blacks with cocaine use, building a fear around minorities who used drugs. The influence of physicians and pharmacists, along with heightened concerns of minorities who use drugs, convinced the United States to ban opium smoking and restrict the use of cocaine in 1903. With the shifting cultural perspectives associating minorities with habit-forming drugs, states started passing anti-drug laws. Pennsylvania enacted antimorphine laws in 1860, while Ohio passed a law against smoking opium in 1897. More states followed suit, passing laws to control cocaine and opiate use between 1901 and 1903. Much like the patchwork legislation seen in the United States regarding the legalization of cannabis, the severity and limitations of legislation varied from state to state. Jacksonville, Florida passed a law in 1912 allowing physicians to prescribe habit-forming drugs to individuals considered addicted but also required recordkeeping to avoid overprescribing patients. Also, possession of these drugs without a prescription was considered a misdemeanor. The Tennessee Narcotic Act of 1913 established a similar tactic, which created a registration of people addicted to narcotics and receiving prescriptions. New York passed the Boylan Act in 1914, which allowed physicians to prescribe habit-forming drugs to people who were addicted. Still, it also criminalized individuals possessing drugs without a prescription and physicians who did not follow intensive recordkeeping practices. The law resulted in physicians limiting the number of prescriptions they wrote for fear of misinterpreting the law and being arrested. This practice allowed police to arrest more people for illegal possession and caused overcrowding of treatment facilities, jails, and prisons. The legislation gave state police the power to enforce prohibition and restrictions by administering fines and jail terms. It also declared drug use worse than murder, “The murderer

who destroys a man's body is an angel beside one who destroys that man's soul and mind" (American Pharmaceutical Association 1903:477).

At the Federal level, the US government established the Pure Food and Drug Act of 1906 and the District of Columbia Pharmacy Act. The purpose of the Pure Food and Drug Act was to develop requirements and guidelines for labeling food and drugs, such as products that contained alcohol, cocaine, narcotics, and cannabis. As the public became informed of the presence of these substances in their products, they purchased them less frequently, resulting in companies lowering the amount of drugs in their products over the following two decades. In addition, the District of Columbia Pharmacy Act also established legal differences between registered pharmacists and hawkers. The acts did not restrict drug use, but it was the beginning of regulating formal drug distribution networks (Boldt 2010).

It is essential to recognize that drug policy in the United States does not function within a silo but is deeply ingrained in foreign affairs. While domestic policy restricted drug use in the United States during the early 1900s, the United States also worked to prohibit opium use and trade across the world, starting with the Philippines and the Indian opium trade to China. In China, there were concerns about opium addiction and cultural notions that opium use contributed to the lack of success in the country. As a result, the United States organized a series of conferences to help China overcome opium addiction. In 1909 The United States arranged the Shanghai Opium Commission, the first international conference on narcotics and opium trafficking. Resolutions made at the meeting but not ratified included calling on governments to suppress opium smoking, reexamining legislation on the prohibition and regulation of non-medical opium use, and ceasing the exportation of opium to nations that prohibit the importation of opium. In 1912 the United States organized the first International Conference on Opium at the

Hauge. Again, none of the countries ratified any resolutions. Still, there was an impact on domestic policy, including calling for legislation to control morphine, heroin, cocaine, and other drugs scientifically proven to be dangerous and managing the preparation and distribution of medical opium.

While states started restricting the power of physicians in prescribing habit-forming drugs and requiring recordkeeping, global trends in the drug trade influenced federal legislation. In 1914 the US passed The Harrison Act, which went into effect in 1919. Much like the state-level legislation, The Harrison Act established taxes and regulations on registering and recordkeeping for administering and prescribing narcotics and cannabis. It made most narcotics unavailable without a doctor's prescription, limiting non-medical use and identifying licensed professionals overprescribing them (Boldt 2010; Musto 1999). Ultimately, the legislation outlawed the maintenance of addiction by physicians and arrested people in possession of drugs not prescribed by a doctor. The US did not create The Harrison Act of 1914 from the idea of drugs being immoral but out of international pressure to conform to global international treaties (Boldt 2010). This legislative action came at the beginning of World War I with increasing perspectives that people addicted to drugs were non-patriotic because they could not participate in war efforts and thus needed to overcome their addiction. It also took effect shortly after New York established addiction maintenance centers, which were closed under the new law. Increased arrests of individuals without a prescription filled federal prisons. Eventually, overcrowding led to the establishment of narcotic farms to divert people addicted to drugs from jails to treatment facilities. However, they essentially functioned as jails under the Porter Narcotic Farm bill of 1929. While most legislation focused on limited narcotic use, the Willis-Campbell Act of 1921

restricted doctors' ability to prescribe liquor, showing that all substances were under attack by federal regulation.

The US passed the Narcotics Import Act of 1922 after ratifying the Hague Convention, limiting narcotics exports to other nations. The goal was to constrict the global narcotics trade and limit the supply to reduce addiction rates. Other countries that ratified the Convention were encouraged to create similar legislation. At the Second Geneva Convention 1924-1925, the US pushed nations to focus on approving legislation to prohibit the manufacturing of heroin, but there was no agreement among the countries in attendance. During the Convention, cannabis became a topic of discussion. Although cannabis was not an issue in the US at the time, there was a debate on controlling the global shipping of cannabis. Ultimately the Convention made no final decisions on restricting trade for the medical and scientific use of cannabis. The US did not pass any federal legislation on the issue until 1937.

Six years after the Geneva Convention in 1931, nations converged for the Geneva Conference on the Limitation of the Manufacture of Narcotic Drugs. This meeting was essential to establishing two drug schedules based on the potential harms associated with drug use which later influenced legislation for drug scheduling in the US in the 1970s. Additionally, the conference established stricter expectations on exporting heroin, regulating the trade of drugs, and organizing campaigns against drug addiction.

Between the 1920s and 1940s, with the Geneva Conventions, concern started to grow about "the new menace to America's schoolchildren" (Musto 1999:214). Social and cultural attention shifted towards negative associations between cannabis use, immigrant populations from Mexico, and increased crime putting pressure on the federal government to pass legislation to control cannabis use. In 1937 the US passed the Marihuana Tax Act to impose taxes on the

sales of cannabis and hemp to reduce access to them. Policymakers modeled the legislation off the National Firearms Act, which created a transfer tax on firearm sales. The goal was to prohibit access to cannabis, but the legislation ultimately made it more challenging to get. Despite a lack of problematic cannabis use in the US, Dr. Carl Voegtlin of the National Institute of Health stated that cannabis use caused insanity and pushed to pass the bill. While the legislation came from the federal level, local police enacted it with the assistance of the Federal Bureau of Narcotics.

In alliance with the Geneva Conventions, the US passed the Opium Poppy Act in 1942, which regulated the legal cultivation of opium poppies in the US. This act restricted the ability to export opium to other countries and reduced the supply of opium in the US. Considering trade restrictions between countries during World War II, addiction levels dropped because of a lack of supply. However, concern for increased drug use after the war resulted in expanded discussions on the international limitations of drug use, which heightened in 1946 with the establishment of the United Nations (UN). To address increased concerns, the US modified the Uniform Narcotic Drug Act in 1951 and established minimum sentencing laws for drug offenses. The first conviction for an offense was two years, and subsequent convictions provided no options for probation. An additional modification in 1956 raised the minimum for some sentences to five years and allowed for the death penalty for anyone over 18 who sold heroin to anyone under 18.

Until the mid-1950s, most drug legislation focused on problematic alcohol, tobacco, cannabis, cocaine, and narcotics use. At the international level, there was tolerance for drug use for cultural, ceremonial, and religious reasons (Bewley-Taylor and Jelsma 2012). Although, between 1900 and 1930, over twelve states banned the possession and use of peyote to restrict

the spiritual practices of Native American populations. Most of these prohibitions remained until the 1960s and 1970s, when Native American groups won a series of court cases allowing peyote in religious practices. Many states redacted previous legislation, stating the laws violated religious freedom under the federal constitution's first and fourteenth amendments. In 2006 the US Supreme Court expanded these same rights to the União do Vegetal (UDV), a Christian religious group from Brazil that is the only legal importer of ayahuasca for religious use in the US. Starting in the 1950s, a new type of drug emerged in clinical settings and eventually made its way to mainstream culture, psychedelics. The early years of psychedelics and their eventual emergence into the American culture ushered in a renewed era of drug policy.

The Early Psychedelic Years

Swiss scientist and chemist Albert Hofmann synthesized LSD in 1938. Five years later, he accidentally absorbed some into his skin and noted noticeable effects. A few days later, he intentionally ingested 250 micrograms of LSD and had the first LSD trip while riding his bicycle home. Hofmann also discovered psilocybin, the active compound in psychedelic mushrooms, in 1958 and synthesized it in 1959. Other psychedelics, like mescaline in Huachuma (San Pedro cactus) and peyote, were known well before the synthesis of LSD. However, Albert Hofmann's discovery was instrumental to the beginning of clinical research into psychedelic substances and their potential.

Psychedelic research started in 1949 with Psychiatrist Max Rinkel's study in the US testing LSD on research volunteers at the Boston Psychopathic Institute. This study initiated the first wave of psychedelic research starting in the 1950s. The "model psychosis" approach influenced these early studies with participants consuming LSD to recreate psychosis (Grof

2008). This approach allowed psychologists to understand the experiences of individuals diagnosed with severe mental health conditions, such as schizophrenia. The expansion of these studies increased academic publications on the subjective experiences of LSD and the use of LSD in psychotherapy for the treatment of depression (Frame 2019; Janiger 1959; Savage et al. 1964). In the 1950s, clinical studies focused on using psychedelics in psychiatric treatment. Public interest in LSD therapy in the US grew with the publication of an interview in popular magazines with journalist Joe Hyams and Hollywood actor Cary Grant on the benefits of LSD therapy.

Clinical research continued through the 1960s and 1970s, building evidence of the limited side effects and high levels of safety for psychedelics (Grinspoon and Bakalar 1981; Masters and Houston 1970; Tylš et al. 2014). Additionally, research increasingly focused on the use of psychedelics in treating addiction. For example, between 1962 and 1963, Howard Lotsof researched the use of ibogaine to treat heroin and cocaine addiction. In 1985, the US patent office issued Lotsof a patent for the use of ibogaine as an ultra-rapid detox method for opioid use disorder, despite the illegality of ibogaine at that time. A few studies at this time investigated the potential for LSD to improve creativity. McGlothlin et al. (1964) administered 200 ug of LSD to 15 participants and compared the results of a pre-and one-week post-test with 14 participants in a control group. The results showed insignificant differences between the two groups. McGlothlin et al. (1967) found similar results when comparing an experimental group that received 200 ug of LSD to two active placebo control groups, one that received 20 mg of amphetamine and 25 ug of LSD. Six months after the test, 25 percent of the experimental group, 9 percent of the amphetamine group, and zero percent of the low-dose LSD group felt the drug experience

increased creativity ($n=72$ males). Ultimately, there were no significant differences between the groups during the two-week and six-month testing periods.

In 1947, the US government started its investigation into using psychedelics as weapons of war. The US Navy commenced Project Chatter to test mescaline as a truth serum. In 1953 the CIA initiated MK-Ultra, a project which gave substantial doses of LSD to US and Canadian volunteers to test LSD and other substances as mind control and torture mechanisms. The government discontinued the project in 1973. Two years later, criticism of the government's activities surfaced. In 2001, information regarding MK-Ultra revealed that the government administered psychoactive drugs to people for experimentation without consent and subjected participants to various kinds of torture.

Although LSD was the most commonly studied psychedelic, psilocybin research became popular in the 1950s. American anthropologist Jean Basset Johnson originally studied the therapeutic use of hallucinogenic plants in Mexico before clinical studies. In 1938, Johnson attended a psilocybin mushroom ceremony in Oaxaca, Mexico. Unfortunately, his research ended when he joined the Navy during World War II and died in Tunisia in 1944. Despite the limited distribution of Johnson's research, R. Gordon Wasson's adventures eventually introduced the West to psilocybin mushrooms. Wasson was a hobby mycologist and Vice President at J.P. Morgan Chase who frequented expeditions worldwide. In 1955, R. Gordon Wasson and his wife Valentina Wasson traveled to Mexico searching for *teonanacatl*, the magic mushroom of Mesoamerican folklore. The Wassons found Maria Sabina, one of Mexico's most well-known healers, and participated in a mushroom ceremony. Maria Sabina was notorious for using psilocybin in her traditional healing practices (Estrada 2003). Upon return to the US, R. Gordon Wasson published a story on his psilocybin experience in *Life* magazine, contributing to the

popularization of psilocybin mushrooms, shamanism, and psychedelics in the US culture (Wasson 1957). Wasson's popular publications on his experiences with Maria Sabina resulted in an influx of North Americans to Oaxaca, Mexico seeking their own god experience from Maria Sabina. The constant presence of Western visitors in Maria Sabina's small village changed the community, who blamed her for profiting from traditional knowledge and practice. As a result, the community ostracized her, burning her house and murdering her son. Although Maria Sabina's knowledge brought mushrooms to the Western world and helped treat mental illness, it was at the cost of traditional knowledge, values, and culture, a common theme in Westernizing indigenous plant medicines (Hayden 2003). Another controversial figure to mention alongside Gordon Wasson is Carlos Castañeda, who published a book on the Yaqui practices of plant medicine, *The Teachings of Don Juan* (1968). Castañeda reported his apprenticeship experience with Yaqui Indian Sorcerer don Juan Matus. His book brought attention to anthropology, shamanism, and psychedelic use. However, years later, many people question the truth of his accounts.

Another well-known contributor to psilocybin studies was psychologist Timothy Leary. In the 1960s, Leary and Richard Alpert (later known as Ram Dass) conducted experiments with psilocybin in prison populations. They expanded the studies in the Harvard Psilocybin Project, where Leary, Alpert, and Ralph Metzner, gave psilocybin to graduate students and volunteers at Harvard. These studies aimed to document the subjective effects of psychedelics in non-medical settings. Unfortunately, university staff shut down the project and fired Leary and Alpert for providing psychedelics to an undergraduate student. Academics criticized this research as neither Leary nor Alpert had medical training and administered psychedelics to volunteers without medical supervision, resulting in questions about the research's safety and validity. This

academic critique accompanied a general policy trend that limited psychedelic research opportunities.

The FDA expanded its regulatory authority with the 1962 Kefauver-Harris Amendments to the Food, Drug, and Cosmetics Acts, establishing requirements for research on consumer drugs. These amendments classified psychedelics as unapproved drugs requiring FDA approval before human subjects testing. This legislation means physicians must acquire FDA approval to obtain psychedelics for clinical trials, restricting drug research (Marlan 2019; Oram 2012). The creation of this legislation is a direct result of sociopolitical assemblages. Much like the set and setting merge to create the practice of drug use, as discussed in the previous literature review chapter, the social and political spheres surrounding Leary's research merge and give way to restrictive policies on certain drugs. The academic community (social) conspires with the history of regulatory policy (political) to provide policymakers leverage and reason to shut down any type of undesirable research. The new policy now allows the FDA to determine what substances researchers can study and for what purposes. The sociopolitical assemblage used Leary as a scapegoat to create legislation that created power to control researchers and future research on drugs.

At the same time as Leary and Alpert's research, psychedelics found their way into mainstream Western culture by popularizing LSD as a street drug. The counterculture emerged in the 1960s and 1970s with LSD parties, like Ken Kesey's Acid Tests. The development of this counterculture was synchronous with social justice movements advocating for Black Americans' and women's rights. As a result, the US government started looking for ways to regain control over these deviant sectors of the population and found it by establishing the 1970s War on Drugs.

Declaration of the War on Drugs

Along with the advancements in scientific studies using psychedelics to treat illness, in 1962, the US Supreme Court declared addiction a disease, not a crime. This ruling was instrumental in shifting federal funding to mental health research and treatment facilities compared to law enforcement. Facilities opened methadone maintenance programs to offer methadone as a treatment to people addicted to heroin along with providing mental health services, while narcotic farms, once established to imprison people who were addicted, were transformed into treatment centers. Unfortunately, even with a focus on mental health, there was increased narcotic and cannabis use and the introduction of psychedelics into mainstream culture. This uptick in drug popularity caught the attention of legislators at the state and federal levels. Between 1966 and 1968, California made LSD illegal, while the federal government made ibogaine and DMT illegal. As the criminalization of psychedelics started, social perceptions of these substances changed from therapeutic tools to being a danger to society, similar to legislation and social perceptions of narcotics in the late 1800s and early 1900s. The popularization of street LSD shifted mainstream media reports to the fears and dangers of psychedelia. *Life* magazine published an article highlighting the dangers of LSD, focusing on the threats of the hippie counterculture (Life 1966). Despite previous popular publications supporting LSD in psychotherapy, the renewed focus on the harms of drug use swayed public opinion in opposition to recreational and clinical psychedelic use. This social turn came with historical and political changes by establishing the era of the War on Drugs, starting with Nixon's election in 1969 and the implementation of his law and order campaign.

The Controlled Substances Act and the Nixon Administration

In 1970 the Nixon Administration created the Comprehensive Drug Abuse and Control Act or the Controlled Substances Act to limit the manufacturing, importation, possession, use, and distribution of regulated substances by creating a five-tier drug classification system. Much like early drug policy, international meetings influenced the design of domestic drug scheduling systems in the US and other countries, like Britain's Pharmacy Act of 1968 (Musto 1999; Tinasti 2019; United Nations 1971). For example, the first Convention in 1961 scheduled narcotics, while an additional Convention in 1971 scheduled psychotropic substances. Psychotropic drugs were classified separately from narcotics because they were determined to be substances based on synthetic and plant-based drugs like MDMA (ecstasy), LSD (acid), and psilocybin mushrooms (magic mushrooms). Unfortunately, the classification of psychotropic substances lacks a comprehensive understanding of the nuances between these substances and instead categorizes them as a homogenous group.

The lowest tier, Schedule I, consists of society's most addictive and dangerous drugs. The highest tier, Schedule V, houses the least addictive and dangerous drugs. The legislation classified most psychedelics as Schedule I drugs in 1970, including LSD, psilocybin, mescaline, peyote, MDA, and DMT. The decades following the establishment of the Controlled Substances Act classified additional psychedelics as Schedule I drugs, including mescaline, MDMA, and 2C-X compounds. The legislation also categorizes other non-psychedelic drugs with psychedelics, like cannabis, heroin, and benzethidine. The Controlled Substances Act prevents research and medical use of Schedule I drugs. The only psychedelic not classified as a Schedule I drug is ketamine, a Schedule III drug used as an anesthetic.

There are two critiques of the Controlled Substances Act drug classification system. First, the classification system creates a paradox. The assumption of Schedule I drugs is that they are harmful to society, so restricted access to them protects the population (Letcher 2007). However, this assumption is false when examining the research and subjective experiences on psychedelics from the 1950s and 1960s that shows the safety and efficacy of these substances for therapeutic use (Grinspoon and Bakalar 1981; Havens 1964; Isbell et al. 1961; Masters and Houston 1970; Silva et al. 1960; Tylš et al. 2014; Unger 1963). Additionally, the classification of these substances restricts current research efforts to examine the safety and efficacy of these drugs. Essentially, the classification system presumes these substances have no medical benefit while limiting future research examining the potential therapeutic uses of these substances (Andreae et al. 2016; O’Keefe 2013). In conjunction with the 1962 Kefauver-Harris Amendments, this predicament ended clinical research investigating the therapeutic benefits of psychedelics until the 1990s and early 2000s.

Another critique of the act is its ability to classify people as people who use drugs and people who do not. Those labeled as people who use drugs are punished for their deviance, while those who are not become ideologized as model citizens. In essence, this classification is a practice of Foucault’s (1988) biopower, where legal and political powers influence the agency and actions of citizens. Using the terms *illegal* and *improper use* in the legislation creates a semantic binary where there are legal and illegal forms of managing controlled substances (§801-2). This binary determines people who legally use drugs and administrators, like formal institutions and medical patients, and people who illegally use drugs and administrators, like people addicted to drugs and people who sell drugs. People who use drugs legally are individuals who use pharmaceuticals produced, regulated, and licensed by the government, such as Adderall

for attention-deficit hyperactivity disorder (ADHD) or Xanax for anxiety. Criminals or people who use drugs illegally use street drugs or improperly use prescription drugs. According to the legislation, the difference between a college student who obtains a prescription for Adderall from a doctor and a college student who buys Adderall from a friend is that the student buying it from a friend has “a substantial and detrimental effect on the health and general welfare of the American people” (§801-2). This dichotomy between people who legally and illegally use drugs does not reflect the diversity of drug practices, meaning there are various reasons and behavioral patterns for drug use (Bourgois 2008; Zinberg 1984). Additionally, the policy established ways to institutionalize discrimination and punishment against minority populations. It was essential in acquiring political power after the Civil Rights Movement. Later policies continued to uphold and expand this political power. I provide a deeper discussion of the social implications of the War on Drugs later in this section. Overall, the Controlled Substances Act creates binary identities of medical patients and criminals while restricting research to understand the reality of harms, benefits, and drug use practices.

Additionally, the act influenced funding related to the agencies in power that control the legal and illegal use of scheduled drugs. The Nixon Administration established the Office of Drug Abuse Law Enforcement, which merged with another organization to form the Drug Enforcement Administration (DEA) in 1973. The overall budget for drug enforcement during Nixon’s presidency increased from \$65 million to \$719 million (Baum 1996). This budget included an increase in law enforcement budgets from \$43 million in 1970 to \$292 million in 1974. For research, education, training, and treatment, the administration created the Special Action Office for Drug Abuse Prevention and increased federal funding from \$59 million in 1970 to \$462 million in 1974. The increase of funding to these agencies had particular goals,

“Law enforcers and the mental health professionals have at least one objective in common-effective and knowledgeable control of deviant behavior. Both may effect this control through custodial restraint (imprisonment in a penal institution or care in a mental hospital) or through relative nonrestraint (outpatient therapy or parole)” (Musto 1999:241). Again, the power of institutions, in this case, law enforcement and mental health agencies, enact biopower as controlling agents over individual bodies and actions related to drug use.

In 1972 the US created the Commission on Marijuana and Drug Abuse to report on the current state of cannabis use and the potential for abuse. The commission recommended decriminalizing cannabis, where people found possessing it are written a ticket instead of sentenced to jail. The report's goal was to highlight the opportunity for treatment instead of punishment for cannabis. It also highlighted the undervalued problems surrounding alcohol and tobacco, requesting more attention and action toward them. Despite the committee's recommendations, Nixon refused to decriminalize cannabis because of his strict stance on law and order.

The Ford and Carter Administrations, after the Nixon years, ushered in a more relaxed perspective toward drug use. In 1975 the Ford Administration published the *White Paper on Drug Abuse* which recognized that drug use was a phenomenon that would never disappear, “Total elimination of drug abuse is unlikely, but governmental actions can contain the problem and limit its adverse effects” (The Domestic Council Drug Abuse Task Force: 97-98). At the same time, the report acknowledged that not all drugs are equally as dangerous as others, and efforts to address drug use should focus on those with the most risk, including heroin, amphetamines, and barbiturates. The Carter Administration followed suit with discussions on decriminalizing cannabis up to one ounce. At the state level, Oregon decriminalized cannabis in

1973, putting pressure on other states and the federal government to do the same. In a message to Congress, President Carter presented his perspective on cannabis, “Penalties against possession of a drug should not be more damaging to an individual than the use of the drug itself; and where they are, they should be changed. Nowhere is this more clear than in the laws against possession of marijuana in private for personal use” (Carter 1979:66-67). Despite his efforts, cannabis remains federally illegal.

The Regan Era

The period of drug toleration from the Ford and Carter Administrations was quickly swept away by the emergence of the Regan Era in 1981. The Regan Administration focused on reducing the availability of drugs to curb drug use by increasing law enforcement budgets, decreasing treatment budgets, and passing treatment costs to health insurance companies. The goal of the administration was to achieve a drug-free America.

One of the earliest programs implemented to achieve this goal was the Drug Abuse Resistance Education (DARE) program, established in 1983. The program brought police officers into schools and classrooms to meet with students and present information on the intolerance of drug use, often using publicized scare tactics. Targeting youth to prevent future drug use was intentional, “Inordinate pleasure caused by drugs, moreover, was seen to provide youth with a poor foundation for character development, and a resulting loss of independence and productivity” (Musto 1999:294). Influencing drug-free youth ensures productive and obedient members of society in the future.

A characteristic piece of legislation from the Reagan era was the reemergence of mandatory minimum sentencing in the 1984 Sentencing Reform Act. Policymakers established

minimum sentencing under the Uniform Narcotic Drug Act in the 1950s and later abolished it in 1970. The Sentencing Reform Act implemented them again, creating minimum sentences for drug offenses near schools. It also mandated prison sentences for serious felonies, minimum one-year probation for less serious felonies, and the possibility for sentence enhancements, meaning increasing sentences for drug and violent crimes. Sentence enhancements allow courts to combine minimum sentencing laws with other state laws to promote harsh sentencing for petty drug crimes. For example, Louisiana has a habitual offender law where individuals are sentenced to longer prison terms if they have previous criminal convictions. Bernard Noble was a victim of this practice when police arrested him in 2010 for possessing two cannabis joints, and he received a 13-year sentence. Nobel had two previous drug arrests over 10 years before his 2010 arrest resulting in his extended sentence. Reestablishing mandatory minimum sentences increased the average time in prison for drug crimes from 22 months to 33 months (Peters and Steinberg 2013). In Florida, arrest for possessing most drugs results in a 5-year sentence (Human Rights Watch 2016). This legislation was the first step to paving the way for more harsh and severe crackdowns on drug use and drug-related crimes at the federal level.

The 1986 Anti-Drug Abuse Act

In 1986 the US passed the Anti-Drug Abuse Act calling for a “drug-free America” (Ferreira 2015:273). The act designated \$4 billion to law enforcement to combat drugs and shifted the focus on drug control from treatment to punishment. For example, the law supported random drug testing in the military, schools, and government to penalize people using threats of being fired for drug use compared to getting treatment.

One of the defining characteristics of the 1986 Anti-Drug Abuse Act was the distinction in possession limits between crack cocaine and powdered cocaine. Crack cocaine and powdered cocaine are the same drug in different forms, but courts enact minimum sentencing laws based on different amounts. For first-time offenders, possessing 5.01 grams of crack cocaine is subject to a minimum of five years imprisonment. In contrast, this sentence only applies to those possessing over 500 grams of powdered cocaine. Racial disparity is one of the driving factors in creating and enforcing these sentencing laws. The justice system targets and sentences Black Americans more often than Whites despite similar rates of drug use (Gelack 1997). This legislation directly responded to the crack epidemic in Black American communities because the US aligned crack use with an image of crime and murder perpetrated by Black Americans. Bourgois' (2003) research on street-level crack dealers in East Harlem, New York, during the 1980s presents a different narrative than criminals. Bourgois (2003) argues that dealing and using crack was prevalent in minority communities because it was a way to manage structural violence and systemic racism while living in poverty and facing social inequality. Despite alternative narratives to understand and explain drug activity, the US has a history of linking marginalized populations with threatening images of crime in relation to drug use. For example, in the early 1900s, the US connected smoking opium to Chinese immigrants and cocaine to Southern Blacks. This historical practice of associating drugs with targeted social groups establishes a reason to eliminate that drug from society and "alleviate social disharmony and preserve social order" (Musto 1999:295). The government explained these sentencing disparities between crack and cocaine based on the idea that crack is more potent and bought less often than cocaine. People who use cocaine purchase it in larger quantities less frequently. Despite this explanation, when comparing how the government addressed the crack epidemic to the opioid

epidemic, the racial disparity becomes apparent. The response to the White opioid epidemic is treatment, intervention, and recovery, a stark difference from the minimum sentencing laws and crack house laws established by the Anti-Drug Abuse Act used to manage the crack epidemic.

In 1988 the US expanded the Anti-Drug Abuse Act with additional amendments. One amendment required a Surgeon General Government warning on alcohol, stating its potential harms. This amendment also provided funding to states that implemented driver's license suspensions for drunk driving (blood alcohol content over .10 percent) and later influenced the Intermodal Surface Transportation Efficiency Act of 1991, which provided grants to states that reduced the blood alcohol content for drunk driving from .10 to .08 percent. Another amendment established the death penalty for major drug traffickers involved in criminal enterprises, such as street gangs, the Mafia, and cartels. The death penalty also applies to anyone convicted of a drug felony who is also responsible for the intentional death of another person. Additional amendments allowed for asset forfeiture related to drug crimes and convictions and restrictions around money laundering practices and regulated the use of drug-related language in media. For example, media campaigns switched from using terms like "hard and soft drugs" or "recreational use" to just "drugs" with the understanding that if drugs are illegal, they are harmful, and no type of drug use is recreational (Musto 1999). The Drug-Free Schools and Communities Act of 1989 was an additional amendment that mandated educational institutions to create drug-free campuses and required them to teach students and employees about the penalties of drug use and treatment options at the beginning of each school year.

International conferences also influenced later amendments to the Anti-Drug Abuse Act. For example, in 1988, the UN Convention Against Illicit Traffic in Narcotic Drugs and Psychoactive Substances mandated the criminalization of drug consumption, transnational drug

trafficking, and international money laundering (United Nations 1988). The international drug control regime aims to eliminate illicit and drug-related addictions while ensuring the ability to procure these drugs for medical and scientific uses (UNODC 2008). This international goal of drug elimination is evident in the construction and enforcement of national-level drug control initiatives.

During Reagan's presidency, the fight for a drug-free America had severe consequences. Total incarceration rates increased from 744,208 in 1985 to 1,630,940 in 1996, with half of the increase during the 1980s resulting from drug offenses. Incarceration rates for drug offenses increased from 35,781 in 1985 to 93,167 in 1996. In addition, there were differences in parole and probation terms by states and at the federal level. Legislation ultimately provided more power to prosecuting attorneys over judges in influencing sentences by allowing them to choose to try a case under federal or state law. Overall, crime rates did decrease among youth populations, but the cause is unknown. The decrease may be from deterring youth from committing crimes, using drugs, or serving longer prison sentences, meaning there are fewer youth in communities to commit crimes.

Like the shifting tide between the Nixon Administration and the Ford and Carter Administrations, from stern intolerance of drugs and drug use to increased tolerance, Clinton's presidency after the Reagan administration brought a sense of relaxation and relief to drug-related legislation. For example, during the Clinton Administration from 1993-2001, the Surgeon General granted \$1 million to the National Academy of the Sciences to conduct scientific research on the medical benefits of cannabis. This budget allocation changed the narrative around cannabis from focusing on the potential harms to studying the therapeutic benefits. At the same time, California passed Proposition 215, which allowed anyone with a doctor's prescription

to have access to cannabis. Arizona also passed Proposition 200 in 1997, which allowed doctors to prescribe Schedule I drugs, including cannabis, LSD, heroin, and PCP. Despite these state-level actions, these substances remained illegal at the federal level, subjecting individuals to national regulations.

The RAVE Act and Recent Legislative Trends

The Reducing Americans' Vulnerability to Ecstasy Act (formally known as the RAVE Act), sponsored by Joe Biden, passed in 2003 and attached to the Amber Alert Bill, a child abduction-related law. The purpose of the legislation is to protect the public from the deadly harms of MDMA. Although there are adverse side effects from MDMA use (Carlson et al. 2004; Rigg and Lawental 2018), the most common causes of death related to MDMA are hyperthermia, overheating, dehydration and overhydration from overcrowded club environments, vigorous dancing, and consumption of adulterated drugs (Gwynne 2015; Herrera 2016).

The legislation functions to protect MDMA consumers by eliminating electronic music concerts, which are the primary environment for recreational MDMA use (Treacy 2005). The RAVE Act attempts this by extending the crack house laws of the Anti-Drug Abuse Act of 1986. The Anti-Drug Abuse Act prosecutes building owners for anyone producing or consuming crack inside their properties. The RAVE Act is similar in extending liability to property owners and event organizers for illicit drug use on a property or at an event. Before creating the RAVE Act, law enforcement used the Anti-Drug Abuse Act to shut down raves and music events in Boise, Idaho, for knowingly selling MDMA (Treacy 2005). The language of the RAVE Act places any music festival organizer or property owner at risk for fines or imprisonment if they knowingly permit people to use drugs at their events. Evidence of known drug use includes selling bottled

water, glowsticks, gum, or hard candy, all considered evidence of supplies used by people who take MDMA at raves (Treacy 2005). Additional evidence can include the presence of a harm reduction organization at an event.

There are two consequences of this legislation. First, because the presence of harm reduction services is evidence of known drug use at an event, many music event organizers refuse to have such services available. This lack of harm reduction services increases potential harm to event attendees. People are more likely to consume unknown or untested substances or take substances without the proper knowledge of the dose, which can increase the probability of physical or psychological harm (Mohr 2018). Second, enforcement of the RAVE Act can drive music events underground. These unprompted events can lack proper services for attendees, such as clean and safe water, hygiene facilities, and medical personnel in the case of an emergency (Treacy 2005). The RAVE Act instills fear of retribution in property owners and event organizers, which creates more harm to people who recreationally use MDMA.

In 2011 the Obama Administration established the National Drug Control Strategy to convey the administration's position on drug legalization. Despite current trends of decriminalization in states, "the Administration steadfastly opposes drug legalization...controls and prohibitions help to keep prices higher, and higher prices help keep use rates relatively low" (White House 2011:22-23). Further, the increased budget to fight the War on Drugs during the Obama administration amounted to over \$25 billion by 2014 (Baum 1996). This increased budget came from cutting costs to other programs like education and health care while contributing to building infrastructure for prosecuting and housing drug criminals, like prisons and courts. This trend of increasing budgets and infrastructure to fight the War on Drugs inflated in the 1980s with the Reagan Administration continues today. Enforcement efforts expanded to

include no-knock warrants, asset seizure without notice, longer prison sentences, life sentences, and the death penalty (Ferreira 2015). While drug legislation intends to protect citizens, these same measures justify the killing of American citizens, such as Breonna Taylor. Police fatally shot her five times while serving a no-knock search warrant at her residence. This expansion of drug laws since the 1980s has increased prison terms for petty drug crimes and inflated budgets for infrastructure and enforcement measures at the expense of taxpayers in the name of protecting the American people from the harms of drugs.

Socio-cultural Considerations of Drug Policy

I have focused the recounting of drug policy on a timeline of events, but it is vital to include a discussion on the socio-cultural effects of drug policy. While there is a diversity of socio-cultural considerations, this section focuses on civil sanctions and racial disparities. First, while drug policy highlights the criminal penalties associated with persecution for a drug crime, there are also civil sanctions. Individuals convicted of felony drug crimes lose their right to access government assistance, including public housing, financial assistance, and federal student aid. In 2002, the US Supreme Court upheld a ruling of the Department of Housing and Urban Development (HUD) authorizing no-fault evictions. This ruling allows public housing authorities to evict households due to “the actions of a guest and for events that take place outside of the assisted unit” (McCarty et al. 2015:23). The ruling upheld public housing tenant evictions, including a case where authorities evicted an elderly disabled man because police caught his caretaker with cocaine in his apartment (Jensen et al. 2019). Individuals with felony drug crimes are also ineligible to receive federal assistance like welfare and food stamps. Between 1996 and 2001, over 180,000 women were denied WIC benefits because of this provision (The Sentencing

Project 2013). Additionally, in 1998 the Higher Education Amendments established legislation denying federal student financial aid to individuals convicted of a felony drug crime. Congress modified the legislation in 2006 to only apply to individuals convicted while receiving federal student aid. Despite this change, between 2000 and 2006 this civil sanction denied over 200,000 individuals student federal aid limiting their access to higher education (Mulligan et al. 2006).

Additional civil sanctions include asset forfeiture and loss of voting rights. Law enforcement can confiscate any property believed to be involved in criminal drug activity even before charging a person with a crime. This violates the US right to presumption of innocence, where anyone accused of a crime is innocent until proven guilty. To return seized property, individuals must prove there is no connection between the property and illegal drug activity. This process can be difficult and expensive. Even if a person is not guilty or the police never press charges or convicts them, they still must fight for their possessions. In some cases, law enforcement can keep and use up to 80 percent of seized assets from drug arrests. This reward for drug enforcement creates a monetary incentive for law enforcement to profit from the illegal drug market (Alexander 2010). Between 1989 and 2010, US attorneys seized an estimated \$26 billion in assets from “drug traffickers,” with most cases failing to charge or convict anyone (Jensen et al. 2019; Maguire 2010).

Additionally, felony drug charges result in the loss of voting rights. Over 5.85 million Americans have lost their right to vote (The Sentencing Project 2014). This civil sanction has significantly impacted Black Americans, with 7.7 percent losing the right to vote compared to 1.8 percent of non-Black populations (The Sentencing Project 2014). Politicians can center their political platforms to the needs of citizens with the right to vote, further marginalizing individuals in disproportionate communities who lost their voting rights. Civil sanctions are

more than additional penalties along with criminal charges. They are actions of biopower where government legislation and bodies with authority regulate and control citizens through the threat of criminal punishment and civil sanctions. The enforcement of these policies emphasizes judicial discipline for individuals who do not adhere to the law by producing, distributing, and consuming illicit drugs (Ferreira 2015). Criminal law and social sanctions are a tool for controlling what people choose to do with their bodies and what substances they are allowed to consume. Policymakers and law enforcement disproportionately direct these laws and sanctions toward specific racial and low-income populations.

Racial disparities are another socio-cultural consideration deeply rooted in the history of drug policy. Legislators can create drug policies that disproportionately impact and control specific racial groups. The 1914 Harrison Narcotic Act purposefully linked opium use to the Chinese. It also included cocaine as a banned substance, despite not being a narcotic, because of its use by Black Americans. The Marihuana Tax Act of 1937 functioned on the popular idea that minority groups, specifically Mexicans and Black Americans, were the primary cultural groups who used cannabis (Mosher and Akins 2014). This legislation attempted to marginalize, demonize, and restrict cannabis use among minority populations. Drug legislation does not explicitly state that it targets specific racial groups, but a statement by President Nixon's top advisor John Ehrlichman revealed the racial motives behind the creation of the 1970 Controlled Substances Act,

“The Nixon campaign in 1968, and the Nixon White House after that, had two enemies: the antiwar left and black people... We knew we couldn't make it illegal to be either against the war or black, but by getting the public to associate the

hippies with marijuana and blacks with heroin, and then criminalizing both heavily, we could disrupt those communities...Did we know we were lying about the drugs? Of course we did.” (Marlan 2019:870).

This statement shows the potential for legislation to target specific social groups disproportionately. These policies also create severe socio-cultural implications for those who are disproportionately affected. For example, increased incarcerations of drug crimes result in diminished quality of life by impacting future employability and disrupting familial structures (Jensen et al. 2019). These impacts are felt mainly by low-income populations, especially in the case of asset forfeiture. While this civil sanction intends to target prominent drug traffickers, the median value of seized assets in Philadelphia in 2014 was \$192 (American Civil Liberties Union of Pennsylvania 2015). These examples show the disproportionate impacts of drug policy and enforcement on low-income populations.

Alexander (2010) calls the racial disparities of drug enforcement the New Jim Crow system. Legal and social repercussions include losing the right to vote, getting a loan, obtaining a job, and renting an apartment. The disproportionate impacts of these repercussions on Black Americans further disenfranchise these citizens and create what Alexander (2010) terms a new racial undercaste (77). This undercaste is a group of disproportionate people whose socio-economic position is so institutionalized through legislation and law enforcement that it leaves them and their families generationally trapped in institutional racism. Drug policy is historically built, carried, and embedded on the backs of minority populations and low-income communities.

The most restrictive efforts to create and enforce drug policy in the US were attempts to align with international goals of eliminating the transport and consumption of what governments

consider illicit drugs. Despite the US's best attempts to restrict the supply of illegal drugs, there is evidence that the War on Drugs is a failure at the national and international levels (GCDP 2011). The attempt to increase the prices of international illicit drugs has resulted in the opposite outcome. The UNODC (2012) found that cocaine and heroin prices decreased from 60 percent to 40 percent between 1990 and 2010. The decrease in these prices may be due to production increases. Colombia and Mexico increased heroin production by 67 percent between 1995 and 2009 (US Department of State 2013; UNODC 2010). Cocaine production more than doubled in Bolivia and increased by 17 percent in Peru between 2005 and 2011 (US Department of State 2013). As drug production increased in other countries, the price of drugs decreased in the US (Ferreira 2015). The global consumption of drugs also increased. Consumption of opiates, cocaine, and cannabis increased by 34.5 percent, 27 percent, and 8.5 percent, respectively, between 1998 and 2008 (GCDP 2011). The consumption of cannabis continued to increase for individuals ages 12 and over by 1.2 percent between 2007 and 2011 (NIDA 2011). As summarized by Savidge (2019), increased spending by the DEA and other government organizations enforcing drug policy did little to limit the supply chain of drugs or reduce drug consumption while imposing insurmountable harm to individuals and families caught in the crossfire. With a new turn towards research on drugs, specifically psychedelics, there are renewed opportunities to roll back harmful drug policy, consider nuanced ways of drug use and therapeutic potential, and pay reparations to excluded, penalized, and marginalized communities.

The Psychedelic Renaissance

It is possible to argue that drug policy causes more harm than good by reinforcing institutionalized racism, feeding an underground market of illicit drug production and

distribution, and increasing the inherent risk of drug use. However, despite these antiquated social control practices, researchers speak of a “psychedelic renaissance” (Sessa 2012) or a resurgence in psychedelic studies despite their illicit nature. This section highlights the recent rise in psychedelic studies, emerging from a hiatus inflicted by drug policy. Recent psychedelic studies focus on the benefits of psychedelic use from three perspectives: the Western biomedical perspective, the Indigenous or shamanic perspective, and the recreational perspective.

Western Biomedicine

The resurgence in psychedelic studies started in 1990 when Rick Strassman commenced the first DEA-approved clinical research study on psychedelics since the 1970 Controlled Substances Act. Further psychedelic research emerged in the early 2000s. Some of the earliest studies focused on using psilocybin and LSD to treat cluster headaches and the ability of psychedelics to induce mystical types of experiences resulting in exceptional life transformations (Griffiths et al. 2006; Sewell et al. 2006). Continuing studies since 2006 support the use of a variety of psychedelic substances, including psilocybin, nitrous oxide, MDMA, ibogaine, LSD, ketamine, and ayahuasca, in the treatment of a variety of health-related topics such as anxiety and depression associated with life-threatening diseases, treatment-resistant depression (TRD), post-traumatic stress disorder (PTSD), substance use disorders, obsessive-compulsive disorder (OCD), social anxiety related to autism, and increased creativity (Costa 2022; Wheeler and Dyer 2020).

Researchers found that psilocybin and LSD are effective treatments for anxiety and depression associated with terminal illnesses. Generally, these have been small ($n < 100$) comparative studies that helped to establish that psychedelics could be effective. Psilocybin

studies found that 60 to 80 percent of research participants with terminal illness experienced significant reductions in anxiety and depression during the one and six months follow-up periods (Griffiths et al. 2016 $n=51$; Grob et al. 2011 $n=12$; Ross et al. 2016 $n=29$). Patients also reported feelings of joy, love, ineffability, self-compassion, alterations to identity, reconnection to life, reconciliations with death, and understanding of the role of terminal illness in their life (Belser et al. 2017; Malone et al. 2018; Swift et al. 2017). LSD studies found significant reductions in anxiety in patients with life-threatening diseases and reports of insightful, cathartic, and interpersonal experiences that reduced anxiety and increased quality of life in over half of the study participants (Gasser et al. 2014 $n=12$, 2015 $n=10$).

Studies found psilocybin, ayahuasca, nitrous oxide, and ketamine useful for alleviating treatment-resistant depression (TRD). With psilocybin treatment, patients reported feelings of connectedness and acceptance of emotions and reduced symptoms of depression up to three months after treatment (Carhart-Harris et al. 2016; Watts et al. 2017). Ayahuasca patients demonstrated similar results with significant reductions in depression symptoms compared to a placebo group (Palhano-Fontes et al. 2019 $n=29$). Research participants supplied with nitrous oxide reported substantial improvements in depressive symptoms two hours and 24 hours after receiving treatment (Nagele et al. 2015 $n=20$). Unlike other studied psychedelics, ketamine is the only legal psychedelic prescribable by a physician or mental health professional in the US. In 2019, the FDA approved esketamine, a dissociative for treating TRD. Recent clinical studies found ketamine effective at treating depression immediately (Berman et al. 2000; Ibrahim et al. 2011; Price et al. 2009) and up to several days or weeks after treatment (Irwin and Iglewicz 2010; Liebrez et al. 2009; Mathew et al. 2010). Similar to psilocybin and LSD results in

treating end-of-life anxiety, patients report positive improvements in mental health and well-being when using psychedelics to treat TRD.

Studies on the treatment of PTSD support the use of MDMA as an effective treatment option. Studies find that doses of 75mg to 125mg of MDMA to PTSD patients significantly reduced PTSD symptoms for up to one month after treatment compared to patients provided lower doses or a placebo (Mithoefer et al. 2011 $n=20$, 2018 $n=26$; Ot'abora et al. 2018 $n=28$). Additionally, 100 percent of patients discussed improved self-awareness, desire for engagement in new activities, enhanced quality of life, and reduced PTSD symptoms up to one year after receiving treatment (Barone et al. 2019 $n=19$). Comparable to the results of using psychedelics in the treatment of anxiety and depression, MDMA has the potential to create life-changing experiences for trauma patients.

In substance use disorder treatment, psilocybin, ibogaine, ketamine, and ayahuasca show promising prospects. Patients treated with psilocybin for nicotine cessation experienced significant reductions in daily smoking occurrences, with 67 percent ($n=15$) of participants remaining abstinent 12 months after treatment (Johnson et al. 2017). Many participants identified psilocybin as an essential factor contributing to their success (Johnson et al. 2014, 2017; Noorani et al. 2018). Similar results were reported in studies using psilocybin to treat alcohol dependence. Participants reported either a reduction in the number of drinking days or complete cessation of alcohol in follow-up appointments and reported changes in their relationship to alcohol, increased motivation for behavioral changes, and increased self-efficacy (Bogenschutz et al. 2015, 2018; Nielson et al. 2018). In using ibogaine to treat opioid addiction, studies found that 50 percent of patients reported reduced withdrawal symptoms, abstinence from use, and feelings of letting go and transformation (Brown and Alpert 2018 $n=30$; Brown et al. 2019 $n=44$; Noller

et al. 2018 $n=14$). Studies examining the use of high doses of ketamine provide similar results in treating heroin addiction, with participants remaining abstinent from heroin up to two years after receiving treatment (Krupitsky et al. 2002 $n=70$, 2007 $n=59$). Finally, ayahuasca has proved significant in the treatment of cocaine addiction. Studies found that a substantial percentage of participants reduced or stopped cocaine use, reported feelings of connection with others and themselves, and reduced cravings for cocaine after treatment (Argento et al. 2019 $n=11$; Thomas et al. 2013 $n=12$). Like the other research on psychedelic use in mental health treatment, patients with substance use disorder may find help through various psychedelic substances.

There are limited studies on the use of psychedelics in treating OCD and social anxiety in autistic adults, but the existing studies show promising results. In a survey on the use of psilocybin in the treatment of OCD, researchers found that every patient experienced a decrease in OCD-measured factors during at least one or more sessions of psilocybin treatment (Moreno et al. 2006 $n=9$). In the treatment of social anxiety in autistic adults using MDMA, results found significant improvements in social anxiety measures after one month of the study ($n=8$) compared to a placebo control group ($n=4$) (Danforth et al. 2018 $n=12$). Although research on using psychedelics in treating other mental health diagnoses is limited, these preliminary findings support the need for additional research into psychedelic treatments.

A few studies examine the role of psychedelics in increasing creativity. Researchers believe creativity is a combination of divergent thinking and convergent thinking. Divergent thinking means creating multiple answers to a problem, while convergent thinking means finding a single correct solution (Cropley 2006; Razoumnikova 2013). Mason et al. (2019) found that psilocybin improved divergent thinking and empathy. Additionally, Mason et al. (2021) studied 60 healthy participants and found no differences in convergent thinking between an experimental

group, given 0.17 mg/kg of psilocybin, and a placebo group. The experimental group did report higher ratings of insightfulness. In a microdosing study, Prochazkova et al. (2018) studied 38 healthy individuals and found significant improvements in convergent and divergent thinking. Uthaug et al. (2018) studied the long-term effects of ayahuasca on creativity. They found convergent thinking increased near-significantly 24 hours after the ceremony and significantly four weeks after compared to baseline measurements ($n=57$). Uthaug et al. (2019) found similar results studying 24 participants who smoked 5-MeO-DMT. There are few studies investigating the impacts of psychedelics on creativity. Those that do exist are somewhat inconclusive of the exact effects, calling for more research into the mechanisms related to psychedelics and those of creativity.

The advancement of psychedelic research focused on therapeutic benefits successfully challenges the antiquated legislation prohibiting their use and research. In 2016 the FDA granted Breakthrough Therapy Designation to the Multidisciplinary Association for Psychedelic Studies (MAPS) for MDMA-assisted psychotherapy. This milestone provided FDA approval for MAPS to move forward with Phase 3 Clinical Trials on MDMA-assisted psychotherapy for PTSD. Phase 3 trials include 15 sites in the US, Canada, Israel, and Europe. Participants in the trials will experience 12 weekly psychotherapy sessions that prepare or integrate their MDMA experiences. During the 12 weeks, they participate in three MDMA or placebo sessions with a psychotherapist about a month apart. MAPS views the therapy techniques used with MDMA “as a therapeutic catalyst for participants as they integrate the trauma they experienced” (Doblin et al. 2019:94). A critical aspect of the process, as reported by participants, is the role of the preparatory and integrative sessions along with a strong rapport with the therapist teams (Barone et al. 2019). The studies conducted by MAPS also suggest the role of qualitative research and its importance in a

“comprehensive understanding of the results” and “suggests there is more to recovery than reducing symptoms” (Doblin et al. 2019:95). Although this statement relates to studies in the clinical setting, it highlights the essential role of qualitative data. As Doblin suggests, qualitative data provides insights into the mechanisms of recovery that go beyond checked boxes that produce reported success rates. Qualitative data can capture contextual elements that explain how or why a patient experiences reduced symptoms and healing. MAPS expects full FDA approval of the drug and therapy model by 2023. Additional support for psychedelic research might come as some researchers are turning to psychedelic therapy to help treat the mental health concerns of COVID-19 (Campbell 2020; Robinson 2020).

While clinical research is working to bring psychedelics back into mainstream headlines by creating new models for treating diverse mental health conditions, there are concerns and critiques for the future of mainstream psychedelic medicine. First, Western medicine stems from colonial roots, and psychedelics are no exception. Many plant medicines studied for their psychedelic properties, such as psilocybin and ayahuasca, are plucked from Indigenous communities and resituated within Western laboratories for study. Historically, European conquistadors raided Indigenous communities while demonizing and banning traditional cultural practices and forcing them to assimilate. Now, Western scientists are commandeering these same communities for their traditional knowledge. The resurgence of psychedelic studies and increased psychedelic tourism and capitalism ignores and erases this colonial history “while profiting from the unequal relations of power and access” (Dumit and Sanabria 2022:303). In a way, Western psychedelic medicine, particularly randomized controlled studies, functions as a colonial technology or institutionalization of power dynamics (Dumit and Sanabria 2022). Researchers built Western medical knowledge on Indigenous knowledge and practice but failed

to value the role Indigenous communities have in establishing biomedicine. The following subsection of this chapter (Shamanic and Indigenous Therapeutic Practices) provides a more detailed discussion on Indigenous uses of psychedelics and plant medicines and the disconnections with Western medicine.

Second, the capitalization of psychedelics resituates the purpose of Western medicine from treating illness to enhancing profits. Dumit and Sanabria (2022) argue that the pharmaceutical industry works to regulate randomized controlled trials by controlling contextual elements of set and setting and increasing the profitability of manufactured treatments. Focusing on profit margins leads to concerns around accessibility. After the legalization of psychedelic medicines, only specific populations will be able to access them because of treatment costs and diagnostic requirements for treatment (Marlan 2019). Ketamine is the only legal psychedelic treatment available in the US, and the standard price of one session ranges from \$600 to \$1,200, with a recommendation of six sessions (Majewski 2022). Once psychedelic-assisted psychotherapy is approved, the cost of treatment will significantly increase, potentially up to \$20,000, considering the model requires multiple therapy sessions (Majewski 2022). As of 2020, 11.4 percent of the US population lives in poverty, meaning an individual makes less than \$14,000 yearly (Congressional Research Service 2022). Essentially, the affordability and accessibility of psychedelic treatment will be “medicine for the elite” (Davis 2018). The future of psychedelic therapy must consider affordable access to essential mental health treatment services.

Third, clinical research focuses on “pharmacologicalism,” or the pharmacological effects of a drug on the body without considering other environmental factors that impact the treatment of a patient (Degrandpre 2006). Randomized controlled trials aim to find “magic bullets” or

pharmaceutical drugs that are the only treatment for an ailment or disease (Dumit and Sanabria 2022:294). The problem is that this perspective discredits the role of the set and setting in treatment outcomes. Most doctors administer drugs over long periods with little to no supervision, such as antidepressants. Psychedelic therapy is different in that psychologists administer the drug a limited number of times in a supervised setting, making the outcome of the experience a combination of the pharmacological effects of the drug and the context of administration. When conducting clinical trials on psychedelic therapy, it is difficult to separate the effects of the drugs from the set and setting. However, it is the underlying foundation of Western science to do so. Along with removing the contextual elements of drug experiences, Western science engages in medical reductionism, essentially reducing the subjective experience of people who use psychedelics to medical explanations, dehumanizing the social and cultural influences of experiences (Varley 2019). The future of psychedelic research, and Western medicine, must consider “medicines in context” (Dumit and Sanabria 2022:295) because experiences “cannot be separated from intrapersonal, interpersonal, community, political, and socio-cultural contexts” (Golden et al. 2022:29). Ultimately, context effects the treatment and meaning of the experience (Moerman 2002).

Fourth, along with removing the context of use from clinical studies, pharmaceutical companies are trying to remove the sensory distortions of psychedelic experiences from psychedelics. Researchers are working to isolate the molecular compounds in psychedelics responsible for therapeutic outcomes, such as antidepressant effects. By doing this, researchers can reduce or eliminate the extra-sensory effects of psychedelics. Psychedelics like LSD and psilocybin attach to the 5Ht2A receptor. Parts of the molecule attach to the orthosteric binding pocket (OBP), and other parts attach to the receptor's extended binding pocket (EBP). By

isolating parts of the psychedelic compound that attach more to the EPB than the OBP, scientists can remove the extra-sensory effects of psychedelics while leaving the therapeutic impact intact. One of the reasons for doing this is to reduce the cost of treatment. Patients who do not experience extraordinary sensory alterations do not need supervision for a psychedelic. At the same time, this creates the question of what is the role, if any, of extra-sensory experiences from psychedelics in the treatment process. This question is difficult to answer, considering clinical studies do not focus on subjective experiences to understand how they impact the results. One study on ketamine believes the dissociate effects of the drug are an essential part of treating depression and does not see it as a side effect, advocating for the role of subjective experience in treatment (Dore et al. 2019). Also, isolating non-sensory altering compounds again ignores the contextual factors of set and setting that influence the outcome of a psychedelic experience. It also ignores the entourage effect or the synergistic interactions between molecules in a drug that create psychedelic experiences (Bauer 2019). Studies commonly apply this theory to cannabis, where various combinations of cannabinoids interact to create different effects from consuming cannabis. Such diverse interactions are evident in different brews of ayahuasca using different plants depending on who makes it. Different plant combinations yield different experiences. For example, the Awajún of South America only use the stem and bark from *Banisteriopsis caapi*, which does not create DMT-like visuals but causes continuous vomiting (Horák et al. 2021). When combined with the *Psychotria viridis* shrub, people still have limited but not continuous vomiting and intense visuals. Although there is limited research on its application to psychedelics, isolating specific molecules limits understanding of how they work symbiotically to create different types of experiences.

Finally, a renewed clinical interest in psychedelics is creating a movement of psychedelic exceptionalism, meaning researchers and Western culture view psychedelics as better, safer, or more beneficial than other types of drugs like opiates or stimulants (Lawlor 2020). Challenging this exceptionalism is essential because exceptionalism marginalizes people who use other drugs besides psychedelics, increasing the potential harm of use. All drugs have inherent risks, but risk and danger fall on a spectrum. Because researchers are studying psychedelics in laboratories as therapeutics, it makes them exempt from the stigmas around other kinds of drug use. Why are other classifications of drugs, like cocaine or heroin, not of interest to researchers for treating depression or anxiety? Western medicine does not know the therapeutic benefits of other drugs because it has not studied them. How do we know if they are less harmful or less addictive? How do we study the pharmacological, cultural, and social contexts of all drug use to place psychedelics within a more extensive discussion around the risks and benefits of drug use in general? This exceptional perspective toward psychedelics influences legal, political, and social constructions. For example, policymakers are introducing legislation to expand research on psychedelic treatments for veterans (Ahlam 2022). Opening treatment to a specific population sector is another form of psychedelic exceptionalism where medicine and researchers target only a particular portion of the population for psychedelic treatment. In this practice, some are exceptional, while others remain criminalized and stigmatized. Dr. Carl Hart, Professor of Psychology at Columbia University, describes how people who use drugs are all doing the same thing, “seeking a way to alter their consciousness” and “it’s just wrong to vilify people for wanting to alter their consciousness and the particular drug that they use, especially when you’re doing the same thing with another drug” (Lawlor 2020). Researchers studying all drugs, especially psychedelics, have a role in countering psychedelic exceptionalism. My attempt to do

so is by recognizing the larger social, political, and cultural contexts of all drug use and reflecting on and recognizing how my research contributes to this exceptionalism. Western biomedical studies should consider doing the same.

Shamanic and Indigenous Therapeutic Practices

Anthropological and archaeological evidence reveals the historical use of psychedelic plants by many cultures worldwide (Carod-Artal and Vazquez-Cabrera 2006; De Smet 1996; El-Seedi et al. 2005; Guerra-Doce 2015; Miller et al. 2019; Rudgley 1998; Samorini 1992). Other research provides an examination of the practices of plant medicines in indigenous cultures, including the use of ayahuasca in the Peruvian Amazon, the role of shamans in the Native American healing process, and the diversity of plant medicines used for inducing trance states for healing across South America (Dobkin de Rios 1972; Harner 1990; Lörler 1989). The use of plant medicines in traditional healing processes combines the shaman, the plant used for treatment, and ritual practice.

A shaman is “a man or a woman who enters an altered state of consciousness – at will – to contact and utilize an ordinarily hidden reality to acquire knowledge, power, and to help other persons” (Harner 1990:20). There are many terms for a shaman including maestro, curandero, ayahuasquero, and vegetalista, but most prefer the term shaman (Dudek 2022). Shamans are trained in the art of healing using ceremonies, songs, chants, and activities to communicate with other non-human beings (Dobkin de Rios 1984). They also protect patients from evil spirits and unskilled practitioners or people who recreationally use medicine (Dobkin de Rios 1984; Haden et al. 2016; Lörler 1989). Various practices around plant ceremonies exist and differ based on context and culture. However, the overarching purpose of the shaman consuming a plant

medicine is to enter an altered state of consciousness that allows them to communicate with ancestral spirits, gain insight into the causes of illness for a patient, and discover a cure for treatment. Once the shaman determines the cause of an illness, they suck or remove the entity from the patient with assistance from a spirit helper (Harner 1990). Potentially one of the most well-known healers is María Sabina, who was notorious for using psilocybin in her practice of healing people. She referred to the mushrooms as “the little children” who would provide her with the necessary powers for healing (Estrada 2003).

Shamans use many plant medicines for healing, including peyote, mescaline, ayahuasca, datura, chacruna or N-N-DMT, psilocybin, and Huachuma (San Pedro) (Dobkin de Rios 1984; Harner 1990; Karsten 1923; Schultes and Hofmann 1992). Many of these plants are also known as initiation plants. Indigenous cultures integrate these plants into cultural contexts by using them in rites of passage like marriage or coming-of-age ceremonies (Kirshner and Meng 2012). Shamans use ayahuasca in shamanic settings, but its composition varies based on cultural context. Ayahuasca is a term used for a mixture of plants used by many Indigenous groups in the Amazon, but most commonly made from *Banisteriopsis caapi* vine and leaves of the *Psychotria viridis* shrub, which contains DMT (Dumit and Sanabria 2022; Talin and Sanabria 2017). Over time cultures merged ayahuasca practices with Christian, Spiritist, and Afro-descendent religious practices resulting in three modern religions: Santo Daime, União do Vegetal, and Barquinha (Labate and MacRae 2010; Talin and Sanabria 2017). These new religions are what Labate (2000) calls neoayahuasca, where they are not Indigenous practices or Ayahuasca churches but a conglomeration between various Indigenous and modern religions (Dumit and Sanabria 2022).

A sibling to ayahuasca is purgahuasca, a tea made from only *Banisteriopsis caapi* and contains no DMT. Consumers of this tea experience constant vomiting, which is an essential part

of the therapeutic process (Horák et al. 2021). Unlike ayahuasca, purgahuasca does not contain DMT and does not result in visual alterations, although it may create geometric shapes, and consumers may have vivid dreams after the experience (Horák et al. 2021). The Awajún use it in initiation ceremonies, and men drink it to prepare for warfare, hunting, and fishing through dreaming. Horák et al. (2021) found that local cultures consider purgahuasca a hallucinogen, psychedelic, or entheogen depending on the context of use.

Salvia is another plant medicine used in Indigenous practices and is only native to Sierra Mazateca in Oaxaca, Mexico, the same region where Gordon Wasson found Maria Sabina for psilocybin mushrooms. The Indigenous name for salvia is *xba pastora* and is associated with the Virgin Mary. Common effects of salvia include visual and auditory distortions that may intensify with the setting (Faudree 2020). Western science is increasingly interested in salvia for its medical potential, specifically Salvinorin A, an active isolated compound of salvia. Researchers consider this compound more than 20 times more powerful than psilocybin (Maqueda 2018).

Shamans use plant medicines to cure patients of what the Western medical paradigm considers psychological disorders, such as anxiety, marital problems, chronic pain, and alcoholism (Dobkin de Rios 1984). Instead of conceptualizing disease and illness through Western science, shamans see possible causes as evil spirits, malpractice of other shamans, or other people's evil intentions (Dobkin de Rios 1984; Harner 1990; Karsten 1923). As described in Faudree's (2020) research on salvia among the Mazateca, plant medicines can provide a variety of treatments for humans and animals, including joint pain, swelling, inflammation, skin irritations, sore throats, headaches, fevers, arthritis, gastrointestinal problems, menstrual cramps, and drug and alcohol dependence. It can also cure non-Western ailments, like what the Mazateca call *panzon de barrego* or swollen belly caused by a curse (Faudree 2020).

Alcoholism is another disease caused by a malicious individual cursing another person for being irresponsible and drinking too much (Dobkin de Rios 1984). Indigenous communities do not consider alcoholism an addiction in some contexts, especially with ayahuasca. Instead it is referred to *dependência*, being dependent, or *vicio* being deprived (Talin and Sanabria 2017). When someone is dependent or deprived, a family member brings them to a shaman to find and drive out the evil intentions and cure them of their illness. Research supports the reduction of alcoholism in indigenous communities that use peyote and ayahuasca in ceremonies (Albaugh and Anderson 1974; Grob et al. 1996; Halpern et al. 2005, 2008; Hill 1990; Stewart 1987). At the same time, “ayahuasca is no magic bullet” and can be dependent on context and the ability of a person to gain perspective and understanding of their behavior and patterns (Talin and Sanabria 2017:27). There is more to plant medicines than healing people of ailments, disease, alcoholism, and curses. The Union of Indigenous Yagé Medics of the Colombian Amazon (UMIYAC) made a statement about cultural appropriation that included their connection to and the healing power of ayahuasca:

“With yagé we also heal the illnesses of community members, protect our territories and protect the lives of our leaders. Thanks to the sacred yagé plant since childhood, communicating with the spirits of Mother Earth we have cultivated wisdom, and have learned which medicinal plants are useful for curing diseases. Yagé is not a hallucinogen and is not a psychedelic plant. Yagé is a plant that has a living spirit and teaches us how to live in peace and harmony with Mother Earth.” (UMIYAC 2019 as quoted in Dumit and Sanabria 2022:302).

This declaration speaks to the deeper ontological entanglements of Indigenous communities to plant medicines, spirits, and the environment that are essential to their healing practices.

Indigenous ontology relates to entangled relationships between Indigenous communities and shamans and the more-than-human actors around them, including plant medicines and the physical environment. As Williams et al. (2022) described, these more-than-human ontologies emerge from the interdependence between humans and environmental elements that extend the meaning of “persons” and recognize the sentience and agency of non-humans. These more-than-human elements include plants, animals, microorganisms, mountains, and rivers (Williams et al. 2022). Plant medicines are persons in themselves. As mentioned in the UMIYAC quote, “Yagé is a plant that has a living spirit” (2019), and in using salvia, plant medicines are “sacred beings” (Faudree 2020:586). They communicate with humans and are considered plant teachers, similar to Maria Sabina’s use of psilocybin mushrooms, and provide knowledge through “trans-species communication” (Dumit and Sanabria 2022). Communication with plant medicine occurs through speaking, singing, and chanting to plant spirits. Faudree (2020) argues that this practice is a social action that brings plant spirits into dialogue and interaction with humans and the physical world. In using salvia, the Mazatec ask the plant spirit for permission to use it before harvesting it; otherwise, they risk negative consequences like illness or bad fortune (Faudree 2020). This practice highlights the agency of plant medicines in accepting or rejecting interactions with humans and the physical world. In Indigenous practices, place is a vital element of the physical environment that influences more-than-human relationships (Antone 2013; Deloria and Wildcat 2001; Warrior 1999; Williams 2022). For the Mazatec, consuming psilocybin mushrooms is part of their ritual practices to connect with more-than-human powers within the landscape and connect plant spirits with the physical world (Munn 1973). The

Indigenous ontological perspective shapes practices around Indigenous plant medicine for healing based on context. How various Indigenous groups view their relationships to plants and the physical environment determines what songs the shaman sings, who attends a ceremony, and what plant medicine they use to heal someone.

There are diverse rituals and practices in different Indigenous cultures and contexts. Many ceremonies (*veladas*) last several hours, take place at night and in the dark, and have specific practices or rules of engagement (Dudek 2022; Faudree 2020; Talin and Sanabria 2017). For the Santo Daime church, ayahuasca ceremonies require participants to wear all white and refrain from drug use in the days leading up to the event (Talin and Sanabria 2017). Salvia ceremonies have similar restrictions where participants cannot engage in sexual relations and certain social interactions or consume specific foods for several days before and after the ceremony (Dudek 2022; Faudree 2020). Some ceremonies start with prayers or songs before the shaman drinks, or the shaman and the group drinks ayahuasca, salvia, or other plant medicine brew (de Mori 2011; Dudek 2022; Faudree 2020). In some ceremonies, family members accompany the person the shaman is healing. In other cases, healing occurs among the shaman and multiple patients (Dudek 2022; Faudree 2020). Shamans provide a mat or mattress to sit and lay on and a bowl for purging (Dudek 2022). Indigenous communities consider purging a cleansing of the body through throwing up or crying by eliminating negativity in emotions, thoughts, or memories (Horák et al. 2021). Throughout the experience, the shaman sings icaros, drums, and dances which have the power to influence the experience through healing, inducing visions, or purging (Dobkin de Rios and Katz 1975; Dudek 2022). If a shaman notices the presence of *brujeria* (black magic), they can use icaros to protect and clear the space (Dudek 2022). Barbosa et al. (2005) studied two groups (Santo Daime and União do Vegetal) in their

ayahuasca ceremonies. They found that differences in their practices, in terms of icaros and dances, resulted in variations of peace and psychological insight. This finding is evidence of the role of singing and dancing in the ceremonial experience. Another critical component of Indigenous ceremonies is that of community. Talin and Sanabria (2017) found that community was instrumental in the healing experience when studying Indigenous-centered addiction treatment facilities in Italy and Brazil. Participation in the entire process, from creating the ayahuasca mixture to drinking it, participating in the ceremony, and socializing after the experience, creates a sense of belonging and produces “spiritual kinship” (Talin 2012; Talin and Sanabria 2017).

Globalization of Indigenous Plant Medicine

Indigenous plant medicine has increasingly been pulled out of Indigenous cultural areas and spread around the world through globalization and psychedelic tourism contributing to cultural misrepresentation and questions on tourist safety and psychedelic sustainability (Fotiou 2016; Labate and Cavnar 2014; Labate and Pacheco 2010; Luna 2011; Peluso et al. 2020; Razam 2014; Trichter 2010; Winkelman 2005, 2010). Ayahuasca rituals have become available in Australia, New Zealand, South Africa, Israel, India, Japan, Russia, and 22 European countries in the last 10 years (Dumit and Sanabria 2022; Labate and Loures de Assis 2017). Westerners, meaning non-local Indigenous populations from “modern” countries, including Euro-Americans, are forming groups of ayahuasca neo-tribes, merging religious ideas, practices, and beliefs with ayahuasca ceremonies (Dudek 2022). With increased interest in peyote tourism in the United States, there are practices of overharvesting in Texas and Northern Mexico (Fotiou 2016; Muneta 2020). Westerners search for Indigenous shamans looking for authentic traditional plant

medicine experiences for spiritual work and healing (Dudek 2022). While some Indigenous communities work to keep Westerners out of their practices, others provide opportunities.

In local contexts, there is a merging between Indigenous knowledge and Western medical practices in spiritual healing centers and retreats. For example, medical professionals in a Brazilian spiritual healing center act as ceremonial leaders using ayahuasca to direct patient experiences (de Rose 2006). In addition treatment services, some Indigenous practices merge with Western medicine to provide successful alternatives to formal treatment centers. For example, the Takiwasi Center for the Rehabilitation of Drug Addicts and Research on Traditional Medicines gives patients purgahuasca in a few sessions over two to three months, along with mental health counseling using transpersonal psychology (Horák et al. 2021). The model is relatively successful. Sixty-eight percent of patients in 2012 ($n=24$) and 86.5 percent in 2014 ($n=24$) attribute the ceremonies at the center to their recovery from drug addiction (Horák et al. 2021). Many patients who try formal drug treatment feel constrained by the one-size fits all approach to addiction treatment but find flexibility in Indigenous practices that are “tailored and dynamic” to the diversity of drug addictions and uses (Talin and Sanabria 2017:28). For example, during an ayahuasca ceremony, a ceremony leader will sing different songs depending on what the patient is experiencing. While these centers include Western practices, they integrate essential Indigenous elements, such as the idea that plant medicines are intelligent beings and that negative spirits cause addiction (Horák et al. 2021). They act as a “bridge between two medical systems” of traditional and Western medicine (Horák et al. 2021:17).

Despite expanding traditional medicines to the Western world, some critiques of globalization exist. First, there is an increase in the misuse and cultural appropriation of plant medicines. Indigenous leaders require extensive training to practice plant medicine and develop

the Indigenous ontological perspective (Dumit and Sanabria 2022). Some practitioners that cater to psychedelic tourism have limited training, and there are increased reports of abuse (Hall 2021; New York Magazine 2021; Peluso et al. 2020). Second, historical publications on shamanism and Indigenous practices frame plant medicine “as carriers of ancient ecological wisdom, with shamans acting as agents of eternal traditional culture” (Dudek 2022:24). These high standards place expectations on shamans. When they do not meet them, Western psychonauts and spiritualists resort to negative historical ideas around shamanism. Dudek (2022) found that when tourists' expectations of shamans went unmet, they developed negative attitudes towards shamans claiming they are fake, greedy, wicked, or practicing black magic. In reality, there is a disconnection between the ideal image of shamanism held by Westerners and the “fluid, changing, and adapting” nature of Indigenous knowledge and practice (Dudek 2022:24). Unfortunately, these dualities between Western and Indigenous worlds expand, resulting in inequalities in the benefits and costs of the psychedelic renaissance.

Duality Between Indigenous Knowledge and Western Science

There is a duality between Indigenous knowledge and Western scientific knowledge that makes them incompatible. Different perspectives of how to view the world drive these incompatibilities. Ontologies and entanglements frame Indigenous practices, while controlled and standard measures code Western science. For example, Indigenous practitioners enter a plant medicine experience with openness, allowing the problem to emerge from the experience under the guidance of the plant spirit. In contrast, Western medicine goes into the experience with an identified medical problem needing treatment (Dumit and Sanabria 2022). These opposing ideas

shape the relationships that emerge between people and plant medicines. The best framework for exploring this is Faudree's (2020) concepts of enrobing and stripping.

Enrobing relates to the process of building a social world with plant medicine. It becomes entangled in the social, physical, and linguistic elements of human life. In using salvia in healing practices, Mazatec enrobe the plant in social life through rituals initiating or restraining contact with people before a ceremony. The relationship with salvia determines whom an individual can interact with and remain clean to participate in a salvia ceremony. It also dictates who speaks about salvia and in what ways. Faudree (2020) found that Mazatec did not speak about salvia and rituals with anyone outside the community or anyone who did not speak their language. This practice keeps salvia enrobed in the linguistic contexts of the Mazatec. Considering salvia is only found in the Mazatec community, it also keeps it geographically entangled within the social and physical culture. This process existed with Maria Sabina and psilocybin mushrooms in Oaxaca until Gordon Wasson stripped them from their social, physical, and linguistic context.

Western society has a history of stripping Indigenous cultures of their enrobed plant medicines with historical practices of colonialism and imperialism. Western societies strip plant medicines from Indigenous cultures, meaning the social, linguistic, and physical elements that entangle with them. The arrival of the Catholic Church to Mesoamerica in the early 17th century suppressed the ritual practices of psychedelic plants into the colonial period (Faudree 2020). The Indian Removal Act of 1830 relocated 46,000 Indigenous people from their homelands, stripping them from entangled connections between plants and land. Ongoing colonial resource projects for natural resources and energy production continue to divide Indigenous people from their lands which disassemble the enrobed elements of plants and context. Practices of biopiracy,

cultural appropriation, and a lack of recognizing Indigenous knowledge are neocolonialism that continues to strip Indigenous populations of their connections to plant medicines.

With a renewed interest in psychedelics, Western science brings another opportunity to strip plant medicines from Indigenous populations and the surrounding social world. First, they are ripped out of their physical environments, removed from their cultural contexts, and placed within the commodity chain because of increased demand for psychedelics for therapy and scientific inquiry (Faudree 2020). Second, pharmacology's focus on scientific names and isolating active chemicals in plant medicines for treatment remove plant medicines from their Indigenous context. For example, researchers rename *xtba pastora* to *Salvia divinorum* and remove one of the active ingredients, salvinorin A, for testing, which "strips it from the plant that enrobes it" (Faudree 2020:591). The same practices occurred in studying the active psychedelic compound N, N-Dimethyltryptamine found in various plant medicines. When testing for efficacy, researchers test salvia independently in controlled studies, divesting it from its connection with other active compounds in the plant (Faudree 2020). Randomized controlled studies, as discussed by Dumit and Sanabria (2022), are a stripping process. Third, when administering pharmaceutical psychedelics, like psychedelic-assisted psychotherapy, they are focused on "individual notions of health," which remove them from the practices of care between people, plants, and spirits found in Indigenous practices (Faudree 2020:591). Even psychedelic-assisted psychotherapy is a process of stripping, considering it comes from traditional ritual contexts. As Western science strips plant medicines from their Indigenous contexts, it enrobes them into new social worlds defined by commercialization and capitalism. The growing market for psychedelic therapy to address treatment-resistant depression is estimated to gross \$10 billion in annual sales with no benefits to Indigenous populations

(Williams et al. 2022). Placing plant medicines within biomedical frameworks is a continuous practice of appropriation, colonialism, and violence by stripping them from the Indigenous ontological framework (Dumit and Sanabria 2022; Faudree 2020). Talin and Sanabria (2017) argue that psychedelics are tools that need to be understood “within specific ecologies of use and care that are not yet easily comprehensible within the biomedical paradigm” (24).

While Western science does little to protect and recognize its power in stripping Indigenous communities from their social relations with plant medicines, it leaves the question of what there is to do. At the industry level, McGonigle (2016) and Williams et al. (2022) suggest discussions on the international property rights of Indigenous knowledge of plant medicines and the role for-profit companies can play in providing services to Indigenous peoples through funding education programs, medical supplies, and sharing commercialization profits. Additionally, there is a responsibility to consider more-than-human elements like spirits, community, and the environment in framing future research on Indigenous plant medicines in and outside laboratory settings (Dumit and Sanabria 2022). In terms of ecological protections, Dumit and Sanabria (2022) argue that “it is impossible to dissociate the protection of sacred plants from the protection of territories, traditional knowledge, and spirituality,” which requires protecting the environment, forest regeneration, ecological management, food sovereignty, and protections against illegal actions of loggers, hunters, drug traffickers, agro-industrial businesses, miners, and infrastructural projects on Indigenous and protected lands (302). The changes suggested by these authors require using the agency and power of allies within the psychedelic sphere to return stolen Indigenous lands and provide the opportunity to enrobe plant medicines back into Indigenous communities' social lives. At the suggestion of Williams et al. (2022), we

must “rectify the ongoing injustices against Indigenous Peoples and work as allies to restore Indigenous knowledge systems that have evolved in place” (12).

Recreational Psychedelic Use: Context as Therapy

Recreational psychedelic use is broad and includes various settings, including natural environments, music events, private homes, and nightclubs (Bøhling 2017; Davis et al. 2018; Haden et al. 2016; Hartogsohn 2016; Vitos 2017). In the literature, recreational is also described as psychedelic use in naturalistic settings, essentially meaning non-clinical, non-Indigenous, and non-retreat settings (Golden et al. 2022; Kettner et al. 2021; Palamar and Le 2018; Yockey et al. 2020). There has been an increase in people using psychedelics in recreational settings.

However, there is little research on this context of use, meaning we “have the least amount of knowledge about the largest group of users” (Bøhling 2017:134; Palamar and Le 2018; Yockey et al. 2020). While there is a diversity of naturalistic settings for recreational psychedelic use, this section primarily focuses on recreational use at music events.

Context of Recreational Use: Drugs, Set, Setting, and Practice

MDMA is one of the most widely used psychedelic substances in the electronic music scene for its feelings of euphoria and energy and its ability to heighten the music experience (Groß, Kelly, and Parsons 2009; Hunt et al. 2009; Redfield and Thouin-Savard 2017). People who use psychedelics also use MDMA in other locations like bars, clubs, house parties, and other music events (Hansen et al. 2001; Williams Boeri et al. 2004). Other common psychedelics at music events include ketamine, MDMA, LSD, psilocybin, and GHB (Hunt et al. 2007; Malbon 1999; Takahashi and Olaveson 2003; Winstock, Griffiths and Stewart 2001). People

have preferred patterns of what drugs they like to use at specific events to achieve desired effects. For example, people may choose ecstasy for a rave or party over ketamine because of its euphoric feelings and enhanced sociability (Hunt et al. 2007). In contrast, ketamine, a dissociative anesthetic, may be preferred in smaller group settings (Hunt et al. 2007).

The physical setting of music events is diverse, including types of music, common drugs of choice, and various components of art, lights, and activities. Common types of music events include raves and music festivals. Raves were associated with bohemian parties in the 1950s. Once they became popular in the 1980s in the UK, they were associated with acid-house/hi-NRG/bass music and increased ecstasy consumption (Kyriakopoulos 2021). Since 2010, the American music scene has used the term Electronic Dance Music (EDM) to encompass multiple electronic genres (Kyriakopoulos 2021). Although ecstasy's history with electronic music has slowly faded, it is still one of the most popular drugs consumed at EDM shows. Music festivals are another type of music event. Unlike raves, music festivals can feature one kind of music (bluegrass, country, funk, jazz, jam band) or a mixture of music genres.

Music events feature a variety of components that vary from each event but often include remote or isolated locations, artwork, color-changing lights, and psychedelic music (Kyriakopoulos 2021; Olson et al. 2020; Vitos 2017). The location is an essential component of creating the psychedelic experience because it allows attendees to remove themselves from the landscape of everyday life, which initiates the ability to explore "inner and outer worlds" otherwise not accessible (Kyriakopoulos 2021). The landscape is also essential because it provides a safe space, free of social and cultural judgment and law enforcement, where people can engage in what otherwise would be illegal and socially stigmatized drug use. Space within the music event also dictates practices around drug use. For example, campsites at multi-day

music festivals are important places where socialization occurs. People discuss psychedelic use practices, including how and when to use specific substances and acceptable and unacceptable behaviors (Dilkes-Frayne 2016). These spaces act as containers to learn how to use psychedelics which influence later practice of using them during the festival.

Kyriakopoulos (2021) discusses the importance of the auditory setting of music festivals where DJs, musicians, sound systems, synthesizers, digital audio workstations, the artist lineup, and the mainstage come together to create the soundscape. Kaelen et al. (2018) found that studying brain images of patients on LSD while listening to music is associated with music-evoked imagery, which serves as evidence of neurological mechanisms related to vivid visualizations during psychedelic experiences. This connection is meaningful in how people experience psychedelics while at a music festival and how musicians and DJs contribute to the psychedelic experience. The literature discusses the role of the DJ in psychedelic experiences, especially in the ability to lead people on a journey (Hutson 2000). In some discussions, the DJ's role is similar to the shaman's role through the concept of technoshamanism (Hutson 2000; Takahashi and Olaveson 2003). Much like the shaman is the leader of a plant medicine ceremony through performing prayers, icaros, and songs to move the patient through the healing process, the technoshaman or DJ mediates the audience's mood and experience. The DJ must gauge and traverse the audience through their journey using music. It is essential to recognize that stark differences exist between Indigenous plant medicine ceremonies and psychedelic music festivals beyond this discussion. The point is that parallel practices within Indigenous plant medicine ceremonies and music festivals guide audiences along psychedelic journeys.

Music festival producers intentionally design the setting of music festivals to create an environment conducive to movement, which means moving beyond the boundaries of everyday

conceptions of the world and around the music event itself. Early European raves that attracted enormous crowds of people to exotic destinations (islands and deserts) for psytrance festivals now influence these musical “dreamworlds” (Kyriakopoulos 2021). Although not all music events take place in exotic destinations (some are in the woods, cow pastures, or warehouses), they still represent a separation of the festival world from the everyday world. The separation between these worlds is a framework conducive to creating a sense of liminality, an element of the psychedelic experience. Festivals are also organized based on the festival culture or rave celebration practices. For example, bright and cheerful music is played during the day, encouraging daytime goers and families with children to explore the festival. In contrast, music at night is darker and encourages those who prefer nightlife to enjoy the event. Kyriakopoulos (2021) argues that repetitive music at festivals “becomes a timestamp regulating the festival routine” (238). The type of music and the time of day influence how and when people engage during a festival. The production of soundscapes drives these patterns (Kyriakopoulos 2021). Additionally, all the elements of the physical setting (music, art, visuals) merge in “technoaesthetics” along with sensory alterations from psychedelics to allow people to journey between outer and inner worlds otherwise inaccessible in everyday life. Kyriakopoulos (2021) describes the music festival as a patterned event, which suggests it is not a naturalistic setting of psychedelic use, but a highly crafted event. Essentially, “to perform a psychedelic rave celebration means to travel, to some degree, within the flows of images, electronic sounds, psychotropic substances, and exotic otherness that assemble its micro-utopian happening” (Kyriakopoulos 2021:229).

What is missing from Kyriakopoulos’ (2021) work on the rave is the community in recreational use. The social setting is vital to the psychedelic experience. Social groups provide

knowledge and education on managing responsible psychedelic use and practice, like which psychedelics to take, how much to take, and when to take them (Agro 2016). Hunt et al. (2007) argue that the meanings within drug use “are socially embedded and socially determined,” meaning people who use drugs recreationally discuss the risks, pleasure, and benefits of a drug within the social context of taking it (87). Additionally, friends play an important role in comforting and assisting friends if they have a challenging experience or if it is their first time. This social trust between people reassures friends that they have someone to rely on if they have problems and can contribute to social bonding (Hunt et al. 2007). The shared experiences and pleasure of drug use function within a “social world of drugs” to create social support and groups (Valentine and Fraser 2007). On the other hand, a lack of social support and established safety measures within a social context can enhance the need for someone using psychedelics to seek medical attention during a music festival (Schlicht et al. 1972).

The literature on recreational psychedelic use highlights how the physical and social settings merge with the set and the drug to create recreational drug practices at music festivals. At the same time, studies suggest that some music attendees can experience transpersonal and transformative experiences with and without consuming psychedelic substances (Kyriakopoulos 2021; Olson et al. 2020). Moreover, these studies propose that the set and setting play an invaluable role in shaping altered states of consciousness that include and go beyond the biochemical interaction between psychedelics and the brain (Fritz 1999; Malbon 1999; Redfield 2017; Sylvan 2005; Takahashi and Olaveson 2003). Knowing the context of recreational psychedelic use establishes a foundation for identifying the drug, set, and setting in this specific type of use. Future research can build on this foundation to examine other relationships and processes that create specific experiences and outcomes.

Mechanisms of Psychedelic Experiences: Liminality, Communitas, Transformation

Clinical studies show the potential for promising mental health outcomes with psychedelic-assisted psychotherapy. Recreational use restricts examining outcomes of psychedelic experiences because of the inability to follow rigid clinical study protocols with control groups. Despite these limitations, subjective studies highlight the outcomes and experiences of people who recreationally use psychedelics. Feelings described from recreational psychedelic use include happiness, joy, peace, self-empowerment, ecstasy, euphoria, bliss, unity and oneness, increased openness and connections to people, creativity, and spirituality (Bøhling 2017; Hunt et al. 2007; Hutson 1999, 2000; Kavanaugh and Anderson 2008; Lynch and Badger 2006; Malbon 1999; Moore and Miles 2004; Redfield 2017; Sylvan 2005; White et al. 2006). Research on psychedelic experiences in recreational settings shows participants can have similar experiences as people in controlled clinical studies, including improvements in wellbeing, social connectedness, depressive symptoms, anxiety, sociocultural unity and understanding, and interpersonal experience (Bøhling 2017; Kettner et al. 2021; Roseman et al. 2021). Additionally, studies on MDMA found that people who consume MDMA can experience profound transformation (Cohen 1998; Eisner 1994; Saunders and Doblin 1996; Watson and Beck 1991). These studies show potential positive therapeutic outcomes of psychedelic use in recreational settings.

Mechanisms that explain how psychedelic experiences create these outcomes include pleasure, liminality, communitas, and transformation. I discuss therapeutic pleasure related to transformation, change, and healing in chapter 2 and a more detailed discussion of the topic later in this section. I cover liminality, communitas, and transformation here. Victor Turner's concept of liminality (1969) suggests that removing oneself from everyday life creates an opportunity to

reevaluate social and cultural constructs in which one typically functions. Within Arnold van Gennep's "rite of passage" (1909), liminality is a stage where an individual loses their original identity but has not accepted a new one. In the recreational context, psychedelic use provides a means of entering a liminal stage through an altered state of consciousness that allows people who use psychedelics to transcend the boundaries of routine life and engage in novel experiences (Hunt et al. 2009). When people take psychedelics, they engage in chemosocial relationships. These chemical relationships are a mechanism for entering liminality. The music festival provides an opportunity to step into liminal spaces where "festal (liminal participants) are temporarily transported beyond their routine, or 'pre-liminal' lives, to a space-time where they are temporarily both in-between and outside day-to-day routines" (St John 2009:147 as quoted in Kyriakopoulos 2021:227). Kyriakopoulos (2021) also describes this liminal process as "an out-of-the-ordinary shamanic space odyssey" by associating liminality with traveling outside of our everyday environments and into the unknown of space (235). Spaces within the festival entangle with psychedelics to establish liminal spaces. For example, Boom festival in Portugal has an area called the "Liminal Village." The festival website describes the area as a "metamorphoses where transformation takes place and [...] visions crystalize into reality" (as cited by Kyriakopoulos 2021). Morgan Gerad (2004) also describes DJs as "techniques of liminality" who guide people on their psychedelic journey, which relates to their technoshaman role at music festivals. As a technoshaman, DJs are crucial in establishing the liminal state for festival goers. What makes liminality important to psychedelic experiences is the potential for this state of consciousness to enhance creativity and provoke transformation (Saniotis 2010; Winkelman 1996), which explains similarities between recreational and clinical psychedelic experiences.

Communitas is another component of psychedelic experiences. Victor Turner's (1969) "spontaneous communitas" involves intense feelings of unity, togetherness, and shared humanity that break down social structures and blur boundaries between the self and others, creating collective effervescence. Collective effervescence can manifest in any collective event, such as protests, dancing, and sporting events. There is an overlap between collective effervescence and Janzen's (1987) therapy management groups. They both are a culmination of social cohesion that emerges from shared experiences. Therapy management groups are specific to the biomedical model of therapy and healing. Like liminality, communitas commonly occurs during rites of passage. In 1897 Durkheim found that dancing, music-making, and listening to music with others can create collective effervescence. Considering that music festivals assemble all these elements, it is common to see reports of collective effervescence from people who attend music festivals. Collective effervescence is recognizable in descriptions of psychedelic experiences of unity and oneness, increased openness, and connections to people (Bøhling 2017; Malbon 1999; Redfield 2017). Communitas within social groups relates to experiences of non-differentiation and neo-tribalism. Non-differentiation is the idea that the unity felt by fellow ravers creates a therapeutic experience breaking down personal boundaries of the self and creating a sense of unity between individuals, gods, and the world (Hutson 2000). Neo-tribalism is a term used by ravers to encompass the therapeutic nature of social unity (Takahashi and Olavenson 2003). Music events are conducive to creating an environment that supports the shared transcendence and collectiveness in altered states of consciousness, which can build non-differentiation and neo-tribalism (Agro 2016; Malbon 1999; Tomlinson 1998). Communitas, neo-differentiation, and neo-tribalism relate to the outcomes of psychedelic experiences because they create opportunities to develop new perspectives through novel insights and reconsideration of relationships with

oneself, others, and reality (Carhart-Harris and Friston 2019). Research on recreational psychedelic use shows increases in wellbeing, social connectedness, personal and collective self-esteem, positive affect and social beliefs, compassion, and collective identity (Kettner et al. 2021; Páez et al. 2015; Pizarro et al. 2020; Włodarczyk et al. 2020). Experiences of liminality and *communitas* from recreational psychedelic use can contribute to long-lasting, life-changing transformations.

Race (2017) defines a transformative event as a situation that changes everyone involved in unpredictable ways before engaging in the event (147). Another way to conceptualize transformative experiences is to take the “prophecies, solutions, remedies, and songs” from an experience and apply them to personal or community issues (Plant 1999:98, as quoted in Kyriakopoulos 2021:235). These two definitions conflict with each other. In Race’s definition, going into an experience with the expectation of being changed and achieving the desired result is not transformation. For example, a shaman entering a plant medicine ceremony looking to cure an illness and finding a cure is not a transformative experience using Race’s definition. Under Plant’s definition, the shaman using the insight provided to them during the ceremony to cure the patient is considered a transformative experience. At the same time, this example brings together the drug, set, setting, and culture. It is a display of chemosociality where the elements entangle and bring about new forms of chemosocialities or becoming. It is a form of functional use that combines the experience’s meaning with healing. It also questions what transformative means and how it relates to becoming.

In recreational psychedelic use, transformative means transmitting spiritual knowledge, a greater understanding of the universe, experiencing something grander than the self, and connecting to different dimensions of reality (Hutson 2000; Redfield 2017). These experiences

are comparable to Plant's definition related to spiritual healing practices. Some people who recreationally use psychedelics attribute significant life changes to transformative psychedelic experiences, such as career changes, which is another definition of transformative based on the person's ability to integrate lessons from the experience for self-improvement (Redfield and Thouin-Savard 2017). Altered relationships with nature, such as feeling connected to nature or practicing ecologically conscious behavior, reported by people who use psychedelics over their lifetime or those who experience mystical experiences and ego dissolution is another possible example and definition of transformative (Forstmann and Sagioglou 2017; Kangaslampi et al. 2020; Kettner et al. 2019; Nour et al. 2017). This application of transformative to changing relationships with nature functions with the beyond-human framework discussed in chapter 2. The new or altered relationships between people and nature express interrelated entanglements between humans and non-humans. From these entanglements with nature and psychedelics, new chemosocialities emerge. Despite these definitions, Kyriakopoulos (2021) argues that psychedelic music festivals or raves are not "transformative," "transcendental," or "liminal" events because they do not consider "the transformation of conditions of subjectivity and the human" (240). Considering all the definitions presented in the literature, a proposed definition of transformative is the anticipated or unanticipated long-term reconfiguration of relationships with oneself or others catalyzed by a psychedelic experience or experiences. This reconfiguration is distinguishable as some type of change from before the experience compared to after it.

Clinical studies establish evidence for positive outcomes related to psychedelic experiences, but recreational use at music festivals also provides opportunities for liminality, *communitas*, and transformation. The music festival is a unique assemblage of "technologies of perception" (Rajagopal 2001), like drugs, digital media, audiovisual art, and dreamworlds

(Kyriakopoulos 2021) that generate “alternative ways of perceiving and understanding reality” and result in transformation (D’Andrea 2004:244 as quoted in Kyriakopoulos 2021:234). Despite the transformative potential of using psychedelics at festivals, this does not designate them a rite of passage which includes separation, liminality, and incorporation (Gennep 1909). Leaving the everyday world (separation) to enter a music festival and engaging in psychedelic use to end up in a liminal space has the potential to result in transformation. Transformation may be a form of becoming in the context of a rite of passage. In transformation, a new cultural or social arrangement emerges from the experience, which is a definition of becoming. However, this process does not result in a rite of passage because, in the incorporation stage, the community must accept the individual back when entering the everyday world by recognizing their newly transformed status. Typically, everyday society does not recognize the new status of the transformed music festival goer, thus making the rite of passage incomplete.

Liminality, *communitas*, and transformation in the context of rites of passage are useful frameworks from the social science literature in understanding psychedelic experiences. At the same time, parts of this framework align with components of chemosociality, as I outlined in chapter 2. First, chemosocial relationships between humans and psychedelics function as a way to enter liminal states during the first phase of a rite of passage. Second, in the psychedelic experience, shared social unity generates *communitas* that parallels Janzen’s (1987) therapy management groups. At music festivals, festivalgoers connect over dancing, music, and drug experiences. In Western medicine, therapy management groups unite over therapy and healing. In both applications, groups of people engage in shared experiences and develop collective effervescence. Finally, the transformational outcome of an experience relates to the process of becoming in chemosociality. If transformation involves creating new chemosocialities, then

becoming is a process of transformation. Liminality, *communitas*, and transformation link recreational psychedelic use and experiences to components of the chemosociality framework.

The Desire for Pleasure

There is a difference in social and cultural perceptions of why people use drugs for medical and recreational purposes. The medical perspective is the use of drugs to treat an ailment, whereas recreational use is related to a negative connotation of laziness, trauma, or addiction. Essentially these differences are understood as a “difference between a moral and an ethical understanding of the meanings and uses of drugs” (Bøhling 2017:140). Social determinants explain non-medical drug use, such as having access to resources or managing trauma responses (Valentine and Fraser 2007). This perspective removes agency from people who use drugs to discern how and why they use them (Valentine and Fraser 2007). In reality, people use drugs for various reasons that change over time, like trauma, pleasure, pain mitigation, enhancement, productivity, and functionality (Lende et al. 2007; Valentine and Fraser 2007). While these reasons cover all types of drug use, literature on recreational psychedelic use suggests other reasons. To some people who recreationally use psychedelics at music events, psychedelics are sacraments, and taking them is part of a spiritual practice that connects them to a god (Hutson 2000; Takahashi and Olaveson 2003). Some people who recreationally use psychedelics consider using such sacraments outside of music events a practice of drug abuse (Takahashi and Olaveson 2003). Bøhling (2017) found that people use psychedelics in recreational settings for the therapeutic effects of transformative and pleasurable experiences.

Some literature argues that pleasurable drug use is associated with hedonism, seduction, and compensation (Hutson 2000; O’Malley and Valverde 2004). The pleasure of moderated drug

use is socially accepted, such as when drug use does not interfere with basic needs like paying bills or buying food. However, pleasure becomes undesirable when an individual becomes dependent on a drug and can no longer meet basic needs. With dependency, the discussion around why someone uses drugs turns from moderated pleasure to seeking relief from anxiety or looking for isolation (O'Malley and Valverde 2004). There are social assumptions that using drugs is the only thing a person who uses does, and the kind of high from using is a drug high (Daly 2017). This sentiment is similar to Valentine and Fraser's (2007) research studying methadone clinics, where "using drugs may have been pleasurable once" but becomes problematic when someone enters treatment because treatment is not for people who recreationally use drugs (414). When the dominant narrative explaining why someone uses drugs settles on the idea of escaping reality, the narrative objectifies people who use drugs and labels them as irresponsible and "adrift from society" (Daly 2017).

When citizens are objectified and labeled as "drug users" and "non-drug users," it creates the framework to initiate biopower, controlling people's bodies. Institutions like governments and policymakers weaponize pleasure discourses for specific outcomes. For instance, governments create social constructs around policing of pleasure by "controlling illegitimate highs" through silencing or disputing narratives of pleasure to control activities by citizens (Dr. Melissa Bone as quoted in Daly 2017; O'Malley and Valverde 2004). The RAVE Act is an example of using the alternative narrative of risk to control raves, dance clubs, and festivals because they are spaces where people consume illegal drugs (Moore and Valverde 2000). On the other hand, narratives of pleasure help create a sense of normalcy around pharmaceutical drugs that may have high abuse potential. For example, the regulated use of Ritalin for ADHD provides patients with authorized pleasure by restoring a sense of normalcy to life that otherwise

feels chaotic. The pleasure is not in the sense of a euphoric high, as associated with unauthorized pleasure, but instead is a managed regime of accepted pleasure (Keane 2008).

Academic literature further perpetuates the stereotypes, assumptions, and biopower attached to narratives of pleasure because it lacks discussion about pleasure. In research on why people use drugs or in discussions on drug abuse and addiction, causality is attributed to cravings and urges, while pleasure is never considered a viable reason for drug use (O'Malley and Valverde 2004). Past research on alcohol use claimed that people use alcohol to fill a deficit of pleasure in their life. It provides a sense of pleasure they are missing. In reality, there are various reasons why someone might drink alcohol. Continued reutterances of narratives focused on cravings support theories that substance use intensifies misery, takes away agency from the individual to want to use, and leads to further dependency theories like peer pressure and neurochemical dependency (O'Malley and Valverde 2004). Lende (2005) provides a counternarrative to this literature, arguing that even when there are neurobiological cravings to use drugs, pleasure does not go away. Repressing pleasure in the literature creates false ideas about why people use drugs.

What is pleasure, and why do people want to use drugs because of it? Daly (2017) describes pleasure as “the buzz of being on top of a mountain isn't just about the view. It's also about the sense of achievement you get from climbing up there.” This quote speaks to the idea that there are multiple ways to achieve a high, and being able to do it creates a sense of pleasure. Rosalind Stone, the publisher of Psychedelic Press, explains, “Exercise gives you endorphins – which, like drugs, love, and chocolate, stimulate the opioid receptors. But with drugs you can stimulate specific receptors to get different effects. They're a means of accessing a range of specific, different highs you can't access any other way – and certainly not through an organic

biological process such as exercise” (Daly 2017). Dr. Melissa Bone, a lecturer on drugs and human rights at the University of Leicester, somewhat contradicts this idea stating that getting high on drugs and life are the same. However, one is endogenous in the brain, while the other is initiated externally (Daly 2017). Some people find different levels of pleasure in different drugs. For patients researched by Valentine and Fraser (2007) at methadone clinics, some talked about loving heroin and how it helped them function to go to work but got methadone because heroin is illegal. Others got methadone because they found it more pleasurable than heroin. The key idea is that people get pleasure from endogenous or externally initiated drugs. Part of using drugs is finding the drugs that provide desired pleasure.

Studying the pleasure of drug use adds to discussions on the context and outcomes of use. Mary Douglas emphasized studying the sociocultural theory of risk, meaning examining risk through the assemblages of social, cultural, and political processes (1985, 1992). Douglas argues that the objective model ignores subjective experience and social and cultural contexts. Placing pleasure in the context of drug use matters to make sense of why people use drugs because “drugs are rarely used in isolation, but to enhance other pleasures” (Daly 2017). Studying the pleasure of drug use allows researchers to understand the pleasures of other activities and practices associated with drug use. Studying pleasure also provides agency to subjective experiences instead of disregarding the quintessential perspective of people who use drugs and those who are ultimately most affected by it. These subjective insights are essential for understanding what pleasure means in context. Hunt et al. (2007) found that people who used drugs found pleasure in having fun and the feeling that they gained something from the experience. Race (2017) discusses the idea of what comes from an experience initiated by pleasure as something that disrupts identity resulting in change and new ways of seeing and

being in the world, which resembles some definitions of transformative. Ultimately, considering pleasure provides a more holistic context of drug use, including the potential for transformation and the subjective insights to understand the mechanisms that manifest it.

How does pleasure fit within the discourse on recreational psychedelic use? Bøhling (2017) argues, “Pleasure of psychedelics lie in the way they alter the users’ capacities to *connect* to, feel and affectively resonate with other human and non-human entities” (138). This pleasure can come from transcendent or transformative experiences or general altered states of consciousness that create physical experiences of energy, strong affection, sensory alterations, and the release of physical or mental tension (Takahashi and Olaveson 2003). Duff (2008) presents the idea of pleasure in context, meaning that studying the context of drug use illuminates how people experience pleasure through practice, space, and embodiment. Practice is what people do while they are on psychedelics at music festivals. Pleasure in practice comes from performative pleasures or how psychedelics enhance the pleasure during typically pleasurable things, like dancing (Duff 2008). Performative pleasures can be long-lasting even after the drug experience is over (Bøhling 2017). Space is the physical, mental, emotional, and social environment of the experience. Pleasure in space comes from enhancing relationships between the person on psychedelics and the environment. This relationship can look like increased nature-connectedness and *communitas*. It can also mean deeper connections to emotional spaces with the ability to explore and express emotions with intensified feelings of laughter, fun, euphoria, spirituality, love, and connectivity through what Bøhling (2017) calls philosophical pleasures, thinking about the meaning of life, oneself, and the universe. Finally, the embodiment is the physiological pleasures experienced in the body on psychedelics that are enhanced compared to states of sobriety. Pleasure in the body comes from “the ways in which

the visual, auditory, and tactile sense of the users are altered” and can include rushes of energy or enhanced ability to see, feel, and hear, and in some cases, the cross coordination of senses through synesthesia (hearing colors, seeing sound) (Bøhling 2017:139; Kaelen et al. 2015). The pleasures in context are contextual and change based on the type of music, type of drug, size of the event, visuals, decorations, lights, and the consumer's mental state (Duff 2008; Redfield and Thouin-Savard 2017; Reynolds 1998; Takahashi and Olaveson 2003).

A discussion on pleasure is not complete without a recognition of the role of pleasure in harm reduction. Despite the attempts to provide agency to people who use drugs to reduce the inherent risk of drug use, there is a pattern of ignoring pleasure in harm reduction efforts. The focus of harm reduction from an organizational perspective is on the practices of drug use and the contexts where they occur, but it ignores one of the reasons for drug use, pleasure (Moore 2008; O’Malley and Valverde 2004; Race 2008). While organizational harm reduction efforts ignore pleasure as a reason for using drugs, social mediation of harm reduction highlights the desire for pleasure. Hunt et al. (2007) found that participants in recreational settings believed using in particular settings could reduce the risk of drugs and maximize pleasure. Additionally, the study found socially mediated practices to increase pleasure from the drug experience, including drinking water, taking breaks from dancing, taking vitamins and supplements to protect against adverse effects, and moderation in dosage and frequency. “Pleasure is not the antithesis of self-regulation and safety, but the medium through which certain shared protocols of safety take shape.” (Race 2008:421)

Recreational psychedelic use provides unique and distinct contexts for psychedelic experiences outside of medical and Indigenous practices. This context provides a group setting that may be ideal for particular individuals and populations (Golden et al. 2022). At the same

time, there are many critiques of recreational practices. Some of these critiques are born from perspectives of medical reductionism and the problematization of drug use (Hunt and Barker 2001). While clinical studies provide rigorous testing procedures for FDA approval and medicalization of psychedelics, they decontextualize the subjective experiences, ignore the role of pleasure, and “obscure some central aspects of how the drugs work and why people take them” (Bøhling 2017:134). Although subjective experience is considered illegitimate in scientific studies, researchers should consider it legitimate “because they’re experienced as real, whether they have objective evidence to support them or are produced by chemical means” (William James as quoted in Daly 2017). Also, existing research sensationalizes recreational psychedelic use as hedonistic indulgences in sex and drugs, which lacks an understanding of the complex relationships between psychedelic use and the diverse variables that create psychedelic experiences (Hutson 2000). Finally, research and data collection methods overlook the sociocultural perspectives of recreational psychedelic use (Takahashi and Olaveson 2003).

Dr. Ben Sessa states, “entheogenic substances are not recreational drugs,” despite admitting how his personal transformative psychedelic experiences in the 1980s UK rave scene influenced his later work on psychedelics (Walker and Elwood 2022). On the other hand, Bøhling (2017) argues that people who recreationally take drugs must be objects of inquiry to study the diversity of psychedelic experiences and understand why they are so popular recreationally and promising therapeutically (133). Future research on recreational psychedelic use at music events must seek to understand the complex relationships between risks, pleasure, physical and psychological effects, culture, spirituality, and the context in creating lived psychedelic experiences (Duff 2004, 2008; Fitzgerald 1997; Malbon 1999).

There is a diversity of reasons people use drugs. One of the most underrepresented reasons is pleasure. The literature shows many ways pleasure contributes to the psychedelic experience by enhancing what people do, their space, and how they feel. The contextual effects of pleasure may suggest that psychedelic experiences are more than pharmacological effects on the body. They may initiate deep connections to other aspects of the music event, such as the environment, the community, and the inner self. Studying the relationships between the pharmacological effects and contextual elements of psychedelic use through the framework of pleasure contributes to the chemosociality of psychedelics. This project aims to investigate what people do on psychedelics and why they participate in certain activities to examine how pleasure enhances the entanglements between the music festival and the psychedelic experience.

Recent Trends in Legislation: Decriminalization, Medicalization, and Legalization

A common theme throughout this chapter is how drug policy ebbs and flows with changes in public and political opinions and research trends. Early psychedelic studies focused on their potential use in psychotherapy, which swayed popular opinion in favor of these novel treatments. At the same time, critiques of these studies arose when psychedelics became popular as street drugs and built a psychedelic counterculture. The reemergence of psychedelic studies focusing on the therapeutic potential of these substances in diverse contexts and a renewed discussion on the pleasures of drug use led to a new wave of drug policy acceptance. These new policies come from decriminalization, medicalization, and legalization initiatives.

Decriminalization

Decriminalization aims to end criminal penalties for drug use and possession and discontinue abstinence-based, coercive approaches to deterring drug use, such as Drug Abuse Resistance Education (DARE) (Drug Policy Alliance 2017; McBride et al. 2009). Many decriminalization initiatives call for no more arrests, jail time, or criminal records for small amounts of drugs for personal use, which reduces the demands on the criminal justice system (Hausfeld 2019; Jaeger 2019). Some penalties for small amounts of possession may include a civil infraction, a small fine, or a low-level misdemeanor. These practices can reduce the number of arrests, jail time, criminal records, harm to people who use drugs, and the required resources needed to enforce drug policy (Jensen et al. 2019).

As mentioned before, drug decriminalization started in 1973 when Oregon decriminalized small amounts of cannabis for personal use. In 1978 another 11 states enacted decriminalization legislation, including Alaska, California, Colorado, Maine, Minnesota, Mississippi, Nebraska, New York, North Carolina, Ohio, and South Dakota. However, this trend stopped with the imposition of extensive drug policies in the 1980s under the Reagan Administration. In 2008, Massachusetts restarted the second movement of decriminalization efforts. Since 2008, 11 more states decriminalized small amounts of cannabis for adults. Current states that decriminalized cannabis include Alaska, Arizona, California, Colorado, Connecticut, Delaware, District of Columbia, Hawaii, Illinois, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oregon, Rhode Island, Vermont, Virginia, and Washington.

States and cities are taking additional steps to decriminalize other drugs. Denver, Colorado was the first city to decriminalize the cultivation, possession, and use of psilocybin mushrooms in May 2019. Oakland, California followed suit by decriminalizing psychedelic plants and fungi like DMT, ibogaine, and psilocybin in June 2019 (Leckhtman 2019). In September 2020, Ann Arbor, Michigan voted to decriminalize entheogenic plants, including ayahuasca, ibogaine, mescaline, peyote, and psilocybin (Deese 2020). In some cases, initiatives promote harm reduction protection, like setting up spaces for people who use psychedelics to seek integration services in the case of challenging experiences (Hausfeld 2019; Kenney 2019).

These initiatives are slowly spreading to the state level. In April 2020, New York introduced a bill to decriminalize psilocybin (Margolin 2020). Notably, California is moving forward with statewide efforts to decriminalize psilocybin for personal, medical, therapeutic, religious, and spiritual uses. Unfortunately, Decriminalize California, the organization spearheading the decriminalization efforts, could not obtain the required number of signatures before the deadline for the initiative to be placed on the October 2020 ballot for the residential vote (Lekhtman 2020). An unfortunate trend in 2020 has been the impact of COVID-19 on moving forward with decriminalization, medicalization, and legalization efforts (Bronner, Matthews, and Munevar 2020; Lekhtman 2020). In Fall of 2020, Oregon passed Measure 110 to be the first state to decriminalize all drugs, including LSD, cocaine, heroin, methamphetamine, and other drugs. In 2021, the District of Columbia decriminalized natural psychedelics, including psilocybin, ayahuasca, and peyote. At the national level, Representative Alexandria Ocasio-Cortez (D-NY) called for the decriminalization of psychedelics and increased support for psychedelic research funding in November 2019.

Legislation that explicitly decriminalizes psychedelics or plant psychedelics is another example of psychedelic exceptionalism. Marlan (2021) argues that psychedelic drug reform is paving the way for future drug reform and not at the expense of other drugs. Arguably, the focus on the benefits of psychedelics over other drugs like heroin and cocaine, which drive drug policy, continues to stigmatize non-psychedelic drugs and those who use them. Oregon's Measure 110 bill to decriminalize many different types of drugs, including psychedelics, is an example of challenging policy and perceptions around drugs that support exceptionalism. Drug decriminalization efforts are not enough to change or fix social inequalities. Practicing decriminalization by law enforcement is subjective, considering they have the power to press charges or issue a citation for possession. This discretion allows for continued inequalities in drug charges. Additionally, decriminalization does not provide equitable access to drugs or agency in choosing what drugs one can consume because it only covers possession.

National and international organizations support decriminalization efforts, including The John Hopkins-Lancet Commission on Drug Policy and Health, the World Health Organization, the American Public Health Association, Human Rights Watch, the Global Commission on Drug Policy, the International Federation of Red Cross and Red Crescent Societies, the National Latino Congreso, the International Federation of Catholic Universities, and the West African Commission on Drugs (Drug Policy Alliance 2017).

Medicalization

Medicalization assumes that certain drugs have medicinal value and only qualified physicians should administer them to patients (McBride et al. 2009). Advocacy for the use of medical cannabis started in the early 1970s, specifically for cancer, glaucoma, vomiting, severe

pain, and severe nausea (Watson et al. 2000). Unlike decriminalization efforts, medicalization started with state-level legislation compared to the city-level. State-level action allowed for the rapid expansion of state-level medicalization efforts. California and Arizona were the first states to allow access to medical cannabis in 1996. Access was limited because there were no dispensaries, so the legislation stated that medical cannabis was legal but provided no framework for access to it (Jensen et al. 2019). In 2010, Arizona passed the full legalization of medical cannabis. By 2016, medical cannabis passed in Alaska, Oregon, Washington, Maine, Colorado, Hawaii, Nevada, D.C., Connecticut, Delaware, Illinois, Massachusetts, Maryland, Michigan, Minnesota, Montana, New Hampshire, New Jersey, New Mexico, New York, Pennsylvania, Ohio, Rhode Island, Vermont, West Virginia, Arkansas, Florida, and North Dakota (Jensen et al. 2019). Additional states who passed medical cannabis since 2016 include Alabama, DC, Louisiana, Mississippi, Missouri, Oklahoma, South Dakota, Utah, and Virginia. Georgia, Indiana, Iowa, Kentucky, Tennessee, Texas, and Wisconsin passed legislation that medicalizes CBD only, a non-psychoactive compound in cannabis. Since federal law restricts any substance's medical legalization, legislation must come from the state or local level (Jensen et al. 2019). Individual state responsibility makes medical legislation highly variable between states. For example, there are differences in how much one can possess, who has the jurisdiction to allocate medical cards, and who is qualified for medical cannabis (Jensen et al. 2019).

Until the 2020 election, no state established legislative measures for the medical use of psychedelics. Oregon is the first state to pass a measure allowing legalized psilocybin therapy starting in 2023. Other states are working on creating similar frameworks. Connecticut set a budget for legalizing psychedelic centers to provide veterans and first responders with psilocybin and MDMA. Texas, Utah, Washington, and Maryland have created task forces to fund and

encourage research into the medical use of psilocybin and alternative treatments for PTSD and traumatic brain injury for veterans. New Jersey is looking at a bill to legalize psilocybin to treat certain disorders. While the medicalization of psychedelics is slowly underway, the spread of medicalized cannabis provides examples of potential challenges to implementing medical psychedelic treatment.

One critique of medical cannabis is how accessibility is restricted based on medical diagnosis. For a patient to receive medical cannabis, they must fit a diagnostic profile that labels them deserving such treatment, reiterating distinctions between legal patients and people who illegally use drugs. This dichotomy is a concern for the future of MDMA-assisted psychotherapy. For example, patients diagnosed with PTSD are eligible for treatment, while patients without this diagnosis are not eligible. This practice of distinguishing patients from people who use drugs is what Bourgois (2008) would consider state control because the state determines the therapeutic potential of a drug and controls who can access it. It is also a function of biosociality, where an individual's biology determines their access to medical treatment (Ticktin 2006). While medicalization grants patients legal access, people who recreationally use psychedelics and experience similar benefits from recreational use are “drug abusers” or “addicts.” Medicalization defines who has access to medical drug treatments and who does not, ultimately reinforcing social hierarchies of access through biopower.

Another limitation of accessibility is economic resources. Insurance companies have stipulations on covered treatments for different illnesses (Dao and Mulligan 2016; Horton et al. 2014). If insurance companies do not cover psychedelic or cannabis treatment, patients face the financial burden of covering these costs. For example, insurance companies restrict access to ketamine infusions for treatment-resistant depression in Pennsylvania. Patients must have two

previous failed antidepressant treatments and currently take an antidepressant for insurance to cover the cost. Some insurance companies will not cover ketamine therapy because it is an “off-label” use of the medication. One ketamine treatment can cost \$500-\$750 without insurance (Ketamine Wellness Centers), while the street cost of one dose of ketamine is about \$20 (NCADI n.d.). Despite the intentions of medical legislation to diversify treatment options, economic constraints imposed by insurance and pharmaceutical companies restrain the availability of these treatments to only those who can afford them. The cost of psychedelic treatment also brings concerns about medical treatments related to the commodification of psychedelics. Cormier (2019) argues that the commodification of psychedelics is required to make them widely available to patients. This argument disregards some people's social and economic exclusion from accessing these treatments. How will the cost of treatment fluctuate over time? Who dictates the cost of treatment? Who will have access to treatment? How will insurance companies determine whom to cover for treatment? How will people access affordable treatment without health insurance? Who is making money off the commodification of psychedelics, at whose expense, and how does that dictate accessibility? These are all essential questions that need to be addressed before building the foundation for the future of psychedelic therapy to keep them affordable and accessible to everyone.

Another implication of medicalization is the disjuncture between state and federal drug policies. Federal prohibition legislation overrules state-level medicalization policies, meaning federal drug convictions take precedence over state policies. The civil sanctions tied to drug policy dictate state and local drug enforcement despite decriminalization and legalization efforts. For example, Illinois has medicinal cannabis, but the Chicago Housing Authority banned the medical and recreational use of cannabis by public housing tenants. The federal government

threatened to withdraw all federal funding from housing authorities if they did not comply with federal drug policies (Devine 2019). This disjuncture between federal and state drug policies reinforces economic and social hierarchies with assemblages of biosociality, identity, biopower, and economics that allow only a limited portion of the population to access medicalized treatments and leave other sectors of the population excluded. These experiences of medicinal cannabis should serve as examples to improve medicalization efforts for psychedelics.

Legalization

The psychological narrative, which advocates for only the medicinal use of controlled substances, assumes that non-medical use causes harm with no medical benefits (Letcher 2007). Legalization is the government's control over legal drugs by taxing their production and distribution (McBride et al. 2009). In 2012, Washington and Colorado voters legalized the cultivation, processing, and retail sales of cannabis and cannabis-derived products for recreational use (Jensen et al. 2019). Oregon, Alaska, and the District of Columbia followed with the legalization of recreational cannabis. In 2016 California, Massachusetts, Nevada, and Maine voted to legalize recreational cannabis. Additional states with legal cannabis include Arizona, Connecticut, Idaho, Illinois, Kansas, Michigan, Montana, Nebraska, New Jersey, New Mexico, New York, North Carolina, Rhode Island, South Carolina, Vermont, Virginia, and Wyoming. Much like medical use, legislation surrounding recreational use varies by state. Some general trends between states include setting legal age limits for recreational purchases, passing legislation but not creating recreational distribution systems, allowing personal cultivation with various limits, setting tax rates, and expunging records of individuals with previous cannabis convictions (Jensen et al. 2019). Although many states that have legalized cannabis follow these

trends, there is significant variation in how these frameworks function within each state. States with current accessible recreational shops include Washington, Colorado, Oregon, Alaska, Nevada, and California. Further, California, Colorado, and Maine allow for on-site consumption of cannabis products (NORML nd). Although legalization exists across states, local jurisdictions regulate, limit, or prohibit recreational cannabis in California, Colorado, Oregon, Maine, Massachusetts, and Washington (Jensen et al. 2019).

When examining the literature on traditional and recreational uses of psychedelics, it is clear these practices have therapeutic benefits, which is an argument for their legalization. Unfortunately, no psychedelic legalization measures exist in the US, but cannabis can serve as an example of some legalization challenges.

First, cannabis legalization occurs at the state level creating variations between states on how much an individual can possess and grow and opportunities for expungement of previous cannabis convictions (Jensen et al. 2019). Second, even with legalization, there are restrictions on the amount of cannabis an individual can possess. This regulation means there are still legal repercussions for possessing more than the law allows. These issues also contribute to continued practices of racial disparity in enforcing the law. Black Americans are still 2.8 times more likely to be charged with a misdemeanor for possession of cannabis than White Americans (Jensen and Roussell 2016). Finally, there are concerns about accessibility and affordability. Some states apply high tax rates to cannabis sales, making the product unaffordable for some individuals. For example, Washington has a 37 percent excise tax on the sale of recreational cannabis on top of a minimum of 7 percent county sales tax (Garza 2016). High tax rates on recreational cannabis sales continue to penalize people who recreationally use cannabis. While waiting for the legalization of psychedelics, cannabis legislation provides insights into potential medicinal and

recreational limitations. Recognizing and learning from these limitations of cannabis can inform future policy development and practices with psychedelics.

Social Discussion

Wedel et al. (2005) argue that policy is a tool used to control the actions of society. They state, "Modern human subjects are governed by – and through – the norms and dictates of particular policies, whether these be concerned with public health, employment practices, education, national security, taxation regimes, 'good governance,' or equal opportunities and race relations legislation" (37). Additionally, policy determines categories of people, those who comply with policy and those who are deviant. Similar to how the gaps between state and federal drug policy create economic experiences, they also create social experiences that speak to policy's classificatory and controlling nature.

First, governments can use policy to limit the range of reasonable decisions one can make as a way to "normalize" specific kinds of behavior (Wedel et al. 2005:38). In doing so, restrictions create more significant opportunities for potential harm related to drug use, especially for people using illegal substances. Nutt (2019) provides an example of this with people who used recreational MDMA in the UK. In 2008, the UK attempted to limit the availability of safrole, a main ingredient in the processing of MDMA. However, underground chemists found an alternative material, anethole, which produces two other chemical compounds, paramethoxymethamphetamine (PMMA) and paramethoxyamphetamine (PMA), which end up in the final MDMA product. The effects of these two compounds are very similar to MDMA, but their absorption into the stomach is slower than MDMA, and the effects of the drug take longer to initiate. Consumers then take more of the drug, increasing their risk of adverse effects.

Additionally, these two compounds block the breakdown of serotonin in the brain, which can result in serotonin syndrome, hyperthermia, seizures, and death. Because of the restrictions on safrole and the alternative practices taken by underground producers, people who consume recreational MDMA face higher risks of adverse effects, including death. Between 2010 and 2013, the UK saw a significant increase in MDMA-related deaths because of this. Thankfully, Chinese chemists found a way to synthesize safrole, which reduced the need for anethole and lowered the risk of harm to recreational consumers. It also lowered the price of MDMA production, making the product cheaper. In an attempt to restrict the behaviors of people who recreationally use drugs, UK legislation increased the potential for harm, which is counterproductive to the goal of eliminating harm due to drug use. These actions also forced chemists to find alternative ingredients to process MDMA, resulting in a cheaper and more affordable product and increasing the rate of MDMA consumption. Despite the efforts of the UK government to restrict the supply, it increased the risk. It opened the market to a cheaper product, ultimately contradicting the intentions of the prohibition approach.

Second, regulations and processes surrounding medical cannabis limit treatment access and define who is considered a legal medical cannabis patient. In Massachusetts, patient registration for medicinal cannabis is complicated and requires access to many resources, including certification letters, photo identification cards, a scanner and computer, technology skills, and a yearly fee (Lamonical et al. 2016). Individuals with limited or no access to these resources cannot participate in the state's medical cannabis program. Further, patients must pay for all related medical costs out of pocket because insurance plans do not cover medical cannabis costs. Such fees can include physician visits, registration fees, and medication. The detailed requirements for registering as a medical cannabis patient are states' attempts to maintain social

order, which privileges some people over others without revealing that it produces inequality (Wedel et al. 2005). For example, low-income individuals who cannot afford the fee or do not have a computer or scanner cannot register as legal patients. Further, individuals lacking proper photo identification, such as undocumented immigrants, do not qualify as legal patients. Medical cannabis legislation functions on the premise of biosociality and biological citizenship.

Biological citizenship is the limited access to social welfare services based on scientific, medical, and legal criteria that recognize injury as a justification for compensation (Petryna 2004). In the case of medical cannabis, individuals with the proper ailments and documentation paperwork, along with the required photo identification, are classified as legal citizens worthy of access to treatment. Individuals who fail to meet these requirements and use cannabis by law are criminals. The legislation defines who legally has access to medical drug treatments and who does not, ultimately creating social hierarchies of access.

Third, the dissonance between state and federal drug regulations fosters environments for continued stigmatization around medicalization. The FDA has not approved medical cannabis as a safe and effective drug for medical treatment. The DEA currently classifies cannabis as a Schedule I Drug, claiming it has no medical purpose (US Department of Justice 2014). With the FDA and DEA having regulatory power over physicians and prescribers of medical cannabis and the current illegal status of cannabis, some physicians are reluctant to prescribe it (Lamonica et al. 2016). Federal oversight of medical professions creates a stigma for those prescribing medical cannabis and patients, even if the drug is for a medical purpose. The continued stigmatization of drugs with a history of prohibition ascribed by the federal government is another form of how policy influences human subjects and identities. Although psychedelics are not legal, it is

possible to see similar social implications from conflicting drug policies at the federal, state, and local levels.

Three overall policy trends are shifting the current tides around drug legislation. First, decriminalization resituates drug possession and other drug-related charges as the lowest priority for police enforcement. As this initiative gains momentum, its effectiveness is questionable due to the subjective nature of policing and arrests. Second, medicalization presents a legal route for accessing psychedelics and other drugs for therapeutic purposes. At the same time, this framework creates social and economic barriers to who can access what drugs for treatment and under what conditions through the exertion of biopower. Third, legalization establishes access to psychedelics and other drugs for personal use that may or may not be related to therapy and healing. Although no states have adopted the legalization of psychedelics, there are possible future complications, such as accessibility due to cost and limits on sales and possession. Despite these supportive drug policies, the ability of policy to control people and their behavior is still an underlying theme. These policies dictate accessibility while also creating disjuncture between local, state, and federal policy that further reinforces existing social hierarchies and stigmas around drug use. Examining this literature and background is essential to understanding and studying recreational psychedelic use. This legislative framework provides a view of the social, political, and cultural constructs surrounding drug use. In the case of recreational psychedelic use, this review informs drug use practices in how and why people use these substances within a particular context.

Summary

US historical drug policy and research trends follow Musto's (1999) argument for continuous fluctuating attitudes towards drugs. US policy tolerated drug use up to the late 1800s and early 1900s. Prejudice towards immigrant populations and international pressures initiated state- and federal-level policies targeting the possession and prescription of narcotics. As legislation continued to pass in the 1920s, 30s, and 40s, legislative bodies came to control drugs like cannabis and extend the consequences of probation and imprisonment. The discovery of LSD and psilocybin shifted academic interests to their therapeutic benefits in the 1950s and 60s. During this period, drug legislation waned until psychedelics entered the mainstream and public concern ruptured. The 1970s saw the establishment of the War on Drugs, driven by Nixon's ideology of law and order. Although a few presidential administrations relaxed drug laws, prohibition and punishment dominated the last 50 years of drug policy in the US with increases in law enforcement budgets, expansions to the criminal justice system, and additions of civil sanctions. Increased global production and consumption of drugs, along with lower prices, indicate a failure of the War on Drugs. New trends in decriminalization, medicalization, and legalization pave the way for accessibility to cannabis and some psychedelics. Unfortunately, individuals continually suffer from the socio-cultural implications of the War on Drugs and renewed policy trends, such as disproportionate accessibility and social inequalities in medicalization and criminalization. Wedel et al. (2005) argue that "public policies connect disparate actors in complex power and resource relations and play a pervasive, though often indirect role in shaping society" (31). This argument suggests assemblages of individuals, institutions, and power dynamics, like biopower, biosociality, and biological citizenship,

distinguish between legal and illegal drug use. These distinctions establish “medicinal users” and “criminal users.”

Recent research into psychedelics challenges prohibition narratives that they have no medicinal value. Clinical studies continue to illuminate the therapeutic potential of various psychedelics for a diversity of ailments. The development of psychedelic-assisted psychotherapy shows promising results in rewriting the future of mental health treatment. At the same time, there are shortcomings in clinical studies, including engaging in biopiracy of Indigenous plant knowledge, prioritizing profits over treating illness, disregarding the role of context in experiential outcomes, removing sensory alterations from the psychedelic experience, and promoting psychedelic exceptionalism.

Indigenous and shamanic practices identify the uniquely ontological frameworks of plant medicine ceremonies. Recent research recognizes the merging of Indigenous knowledge and practices with Western ideas through globalization, retreats, new religions, and cultural appropriation. Additionally, there is an incompatible duality between Indigenous knowledge and Western biomedicine through processes of enrobing and stripping. Western science pulls plant medicines from Indigenous communities, removing them from the entangled Indigenous social, environmental, and cultural context. It strips it of its identity to reconfigure it into the biomedical context.

The limited research on recreational psychedelic use uncovers the assembled elements of the music festival, including drugs, nature, art, lights, music, dance, technoshamans, and social worlds. These elements entangle with the mechanisms of liminality, communitas, and pleasure to create meaningful and, in some cases, therapeutic and transformational psychedelic experiences.

What is missing from the current literature on drug use is a holistic examination of context, a serious consideration of pleasure, and a process of understanding meaning-making and transformation. First, the context of drug use must go beyond the pharmacological effects of a drug, which is the main focus of inquiry in clinical studies. Recreational studies show people can have transpersonal experiences without taking psychedelics (Kyriakopoulos 2021; Olson et al. 2020), which speaks to the role of the set and setting. Parsons (2022) argues that drug use is embedded in larger assemblages resulting in individuals developing multiple meanings and effects related to a substance. Therefore, a holistic consideration of the context includes all elements of a psychedelic experience, including the drug, dose, method of administration, pharmacological effects, set, setting, and practice. Second, pleasure is fundamentally missing from the drug literature. Ignoring pleasure in drug use limits understanding of why people use drugs and what they experience (Coneney and Bunton 2003; Jay 1999). Drug use studies must consider pleasure within the context of drug use. Finally, there are disparities in determining meaningful and transformative drug experiences. Research must study the meaning of drug experiences within context, which requires an inclusive framework for understanding the processes between the contextual elements of drug use and the meaningful outcomes that emerge from them.

This research aims to address these gaps in the literature. First, I incorporate a holistic perspective of recreational psychedelic use using the frameworks of more-than-human things and materiality. A more-than-human things paradigm adopts an Indigenous ontological perspective that all things are living and interact with humans and other non-humans within the psychedelic experience. This inclusion considers the pharmacological effects of substances on a person as social actions within a holistic group of actors. Materiality encompasses the micro and macro

elements of the drug, set, setting, and practice. Combining more-than-human things and materiality bridges the divide between pharmacology and context to create an all-encompassing map of the assemblages contributing to psychedelic experiences. Second, I seriously consider the role of pleasure in contributing to the psychedelic experience. By studying the assemblages and contextual factors involved in a psychedelic experience, I can uncover the role of pleasure which mediates the consumption of psychedelics and creates affective change (feelings in the body, actions, behavior) (Bøhling 2017). Pleasure and the context of use entangle within the psychedelic experience. By examining the context, I can examine the pleasure of recreational psychedelic use. Understanding the role of pleasure allows me to examine how it functions as a force to enhance elements of the psychedelic experience, such as community and environment. Third, I apply the framework of chemosociality to analyze the processes between the context of drug use, the experience, and the meaningful outcomes that emerge from them. Chemosociality serves as the overall structure to bring together the contextual elements of the music festival and recreational psychedelic use (assemblages) along with the processes of pleasure, liminality, and *communitas* (entanglements), resulting in transformation (new socialities with the community, the self, the environment, the drug). Additionally, in discovering new socialities, this study aims to define the meaning of transformation within the context of recreational psychedelic use.

Addressing these gaps expands the current body of literature on drug use in general and recreational use specifically. First, context and pleasure can inspire future clinical research to consider non-pharmacological factors influencing experiences and outcomes. It can also inform harm reduction strategies and outreach to include discussions of pleasure with reducing harm to provide more accepted information and significantly impact people who use drugs (Farrugia and Fraser 2017; Race 2008). Second, this research also has policy implications, like influencing the

language of drug legislation to address issues around equality, accessibility, and reciprocity to Indigenous communities. Third, current legislation is strict in types of drug use, legal and illegal. This research can illuminate the gradient of what drug use looks like and the diversity of therapeutic and healing outcomes so future drug policy reflects reality. Fourth, as the pharmaceuticalization of psychedelics grows, this research can assist in establishing protected spaces to ensure recreational, Indigenous, naturalistic, and spiritual psychedelic use (and essentially all drug use) does not become overpowered by structural dynamics that restrict access and freedom for the personal regulation of use.

CHAPTER 4:

CHEMOETHNOGRAPHIC METHODS

Introduction

This study aims to place participant experience as the primary data source in examining the lived experiences of recreational psychedelic use. This study uses mixed ethnographic methods of participant observation, narrative interviews, and an online survey to dive into the relationships between contextual elements of music events and their contribution to transformative psychedelic experiences. These methods are valuable for understanding lived experiences and their meanings (Harris 2019). I started the study using participant observation in April 2021. My observations informed some of the questions I used in the interviews starting in June 2021. I developed parts of the survey from data collected from my early observations and interviews. I launched the survey in August 2021. I continued collecting data using all three methods in late 2022.

Using these methods, I identify the key elements of the drug, set, and setting and the process of becoming that merge to create transformative experiences for participants. I carefully craft the methods and analysis to answer the questions posed in this research while filling essential gaps in the chemoethnographic literature and expanding the frontiers of recreational psychedelic studies.

The study places a strong emphasis on transformative experiences. This emphasis on a particular experience furthers the knowledge of different kinds of meaningful experiences within

everyday contexts. Many clinical studies focus on mystical experiences, but it is not the only meaningful experience. This study aims to understand what are meaningful experiences in the recreational context of music festivals without the limitations of clinical definitions of mystical experiences. Essentially, the study approaches meaningful experiences as not being defined by mystical experiences.

To determine what these transformative experiences mean, I did not enter the research with a specific definition of transformation. Instead, I asked participants to define and interpret what it means to them. When promoted by festivalgoers and participants on what is meant by a transformative experience, I provided a general definition of “a psychedelic experience that created meaningful change in your life.” I then encouraged participants to determine if their experiences were transformative for them and in what ways. I also used this definition in the survey asking participants to reflect on their most transformative experience. Allowing participants to define transformative allowed for a more exploratory examination of what this term means and how it operationalizes within participant experiences. Chapter eight presents participants’ definitions of transformative.

In addition to reviewing these methods, I consider the limitations of the collected data, the representation of participant experiences, and ethical considerations. Additionally, the University of South Florida Institutional Review Board (USF IRB) approved this study under the premise that it is minimal risk to participants (Appendix III, IRB#002064).

Research Site and Recruitment

Data collection and recruitment occurred across 32 music events between April 2021 and October 2022. Events included 21 single-day shows, 10 multi-day festivals, and one private

house party. I chose these events based on the assumption that people who take psychedelics would attend these events. I based these assumptions on knowledge about the type of music played and the venue's reputation in the community as places where people take psychedelics. Attendance at the events ranged from 30 people to over 45,000 people. The music performed at the events included electronic dance music (EDM), jam band, bluegrass, reggae, psychedelic rock, and folk. Most of the events took place in various cities across Florida, with two events occurring out of state; one in Atlanta, Georgia, and one in Baltimore, Maryland.

Music events, specifically raves, electronic dance music, and jam-band festivals, are among the main sites where people use psychedelics recreationally (Bøhling 2017; Dilkes-Frayne 2016; Fox et al. 2018; Redfield 2017). By examining one of the most popular sites for psychedelic use, this research aims to recognize how the setting and other contextual elements play a central role in the psychedelic experience. Studying the environment where these experiences occur is vital to understanding place-based meaning-making as a component of creating transformative experiences elicited by altered states of consciousness. I provide a deeper description of the research sites in chapter five.

Recruitment

Using flyers, I recruited participants in person at music events and through online websites and social media communities. The flyer included the scope and purpose of the study, eligibility, ways to participate, a scannable QR code to the online survey, and my contact information (Figure 4.1). I distributed the flyers in person to vendors, campsites, artists, and individuals while walking around music events. Additionally, I posted the flyer in local businesses around Tampa and St. Pete, including kava and kratom bars, music venues, and rock

climbing gyms. For virtual recruitment, I posted the flyer with a short description of the study and its purpose to online websites, including DMT World and Psychedelic Grad, and 34 social media communities, including *Tampa Bay Psychedelic Culture Meetup*, *The Baltnerate Universe*, *the Cult of Rezz*, *Thank You Plant Medicine Community*, *The Tribe*, *Zen Awakening*, *Orange Blossom Jamboree*, *Psychedelic Research Participation*, *Florida EDM Events*, *Entheogenic Anthropology*, and *Florida Reggae*. I also posted the flyer to my personal media pages on Facebook, Twitter, and Instagram. Considering I have been a member of the Florida music community for over three years, I had already established trust in the community. After recruiting participants for several months at these events, I started experiencing saturation in the community. People would recognize me from recruiting at past events. Additionally, people I met at festivals supported my social media posts by writing comments about meeting me in person or knowing me as a community member. These social relationships helped legitimize me as a community member and a researcher while granting me access to participants.

The recruitment process used in the study was convenience sampling or choosing participants based on ease of access. For example, attending music events and posting the research flyer on social media provided an accessible sample of the larger music community. Additionally, the project used referral sampling methods, such as chain referrals, index respondents, snowball sampling, and respondent-driven sampling to access additional informants. These sampling procedures are beneficial in studying hard-to-reach populations, such as people who use illegal substances (Bernard 2011). In this study, the sample is difficult to access because they are widespread, stigmatized by drug use, and at high risk for incarceration because of the criminal nature of psychedelics. These characteristics of the study population made referral sampling the best method for recruiting participants.

Anyone interested in participating in the research could complete the online survey by scanning the QR code on the flyer or clicking the survey link on social media posts. Individuals interested in being interviewed for the project could contact me through my USF or private research email, protecting participants from public records laws. To comply with IRB requirements, no participants could be under the influence of illegal substances while consenting and participating in the project. The project did not compensate participants for their time.

For participants to be part of the study, they must be age 18 and older and have had a transformative psychedelic experience at a music event while under the influence of LSD, psilocybin, MDMA/MDA, or ketamine. While each psychedelic creates different physiological effects in the body, this study focuses on a group of psychedelics for three reasons. First, people at music festivals use multiple psychedelics at these events. People will take multiple substances at one time, polydrug use, or use multiple substances throughout an event. About half of the survey participants reported polydrug use related to their transformative experiences. Chapter 6 further explores how many participants took each drug or combination of drugs. Grouping these psychedelics together speaks to the nature of drug use practices within these settings. Second, focusing on only one psychedelic repeats a limitation of clinical studies, which privileges the psychedelic as the central causal agent in creating experiential outcomes. Considering this study is interested in the multiplex of contextual elements contributing to experiences, it accounts for the use of multiple drugs while acknowledging their similarities and differences. This approach makes for a better engagement of chemoethnography. Finally, context, meaning-making, and sociality are central pieces of transformative experiences that form commonalities across different types of psychedelics. Looking at more than one drug across these commonalities illuminates the broader patterns that create chemosocialities around psychedelics.

Methods: Participant Observation

Participant observation involves being deeply rooted and engaged in the study community by participating in the culture or “hanging out” while making descriptive notations on observed surroundings, activities, and feelings (Bernard 2011). I conducted over 650 hours of participant observation during the study period while attending 32 music events. Observation falls on a spectrum from being completely removed from the activities and environment being studied to being completely engaged. My participation and observation ranged from the middle of the spectrum of being moderately engaged to the far end of the spectrum of fully immersed. Moderate participant observation included talking to vendors, artists, and musicians, and observing people taking psychedelics and engaging in festival activities. More immersed activities included attending workshops, listening to music, dancing, participating in flow arts, camping with friends in the community, and engaging in friends’ psychedelic experiences. This more in-depth form of participation aligns more with observant participation than participant observation. In the more moderate cases, I observed what others were doing. In the more immersed situations, I deeply engaged with festival activities and the co-production of knowledge with participants and festivalgoers. This form of participation is valuable in gaining knowledge and data only available to community insiders (Moeran 2009).

Every event was slightly different, but I followed a regular pattern in collecting observational data. I started my day when I heard other campsites beginning to play music, which alerted me that people were waking up. I spent most mornings walking from campsite to campsite, handing out research flyers. When approaching each site, I greeted everyone and asked if they were interested in learning more about my psychedelic research. I then passed out the flyer and briefly explained the project and how to participate, either by contacting me for an

interview or by scanning the QR code for the survey. Finally, I answered questions and listened to antidotal stories people shared with me.

Handing out flyers was valuable for collecting a few types of data. First, informal conversations about the project helped me gather short stories about psychedelic experiences. These stories ranged in settings from music festivals to at home with friends. They were valuable in collecting data on various settings, outcomes, and experiences comparable to narratives from music festivals. Second, I observed the physical elements of the festival. It allowed me to collect notes on how people set up their campsites, whom they camp with, and why these elements matter to the festival experience. Third, I witnessed and learned about what people did in the campground, such as preparing for the day, outfits and costumes, and drug use practices. Fourth, these interactions taught me about community building in the festival scene. For example, people gave me gifts as a sign of appreciation or provided words of support and encouragement for conducting this research.

On mornings that I did not hand out flyers, I attended workshops, such as yoga, cacao ceremonies, sound healings, and harm reduction talks. The workshops provided insight into the diversity of activities available at music festivals aside from the music. I participated in the activities at the workshops, informally talked with others attending the workshops, and shared my flyers with participants and workshop instructors. I provide further details on the workshops I attended in chapter five. These workshops provided data on the music festival's set, setting, and community dimensions. For the set, participating in the workshops allowed me to reflect on how they impacted my mindset moving forward in the day. Noting how the activities affected me made me consider the potential of these activities to influence others' mindsets going into psychedelic experiences later in the day. I could not predict what someone experienced in the

workshop and how it impacted a later experience. Still, it allowed me to see the connection between how participation in the activity relates to setting one's mindset for the rest of the day. For the setting, I noted how organizers set up the workshop space and how it related to the activities. I observed how the space reflected other festival elements, like the art, stages, and campsites. For the community dynamic, the workshops gave me insight into what people do and the community-building process. I noted who and how people participated in the activities and how they reacted. For example, I attended a cacao ceremony and noticed if people attended alone, with friends, with a significant other, or with a child. I also noted how they reacted to the experience, such as smiling, laughing, or crying.

In the afternoon, after distributing flyers or attending workshops, I entered the main venue to engage in the core activities of the festival, like listening to music, dancing, shopping at the vendors, and engaging with the art. During these activities, I made notes on the overall layout of the festival. For example, where were the main parts of the festival located in relation to each other (stages, art, food, vendors, harm reduction)? I also looked for specific details about each of these pieces, like how the stages were designed and decorated, what the vendors were selling, and what the art looked like during the day compared to at night. When listening to the music at the stages, I focused on how people danced, what they were wearing, how they interacted with the people around them, what type of drug use they engaged in (based on openly using, their behavior, or informal conversations), and what other things were they doing. I noticed similarities and differences in the types of music at different stages, how they changed throughout the day or compared to other days of the festival, and how that connected to how people danced, dressed, and interacted with each other. These observations and interactions were

crucial for painting the thick description of the music festival setting. It also helped me identify the practices people engaged in related to community and drug use within the festival.

After the main music ended for the night, I continued observing what people did late at night. I watched where people went after the music, such as silent discos, walking around the campground, or other campsites to listen to other artists play music. Sometimes I walked around the art installations, watched how people interacted with them, and listened to their conversations about them with other people. During these activities, I noticed what drugs people took, how they took them, and how that compared to other drug use throughout the day and at different times of the festival. I also noticed how people's interactions with others compared to other activities and times during the festival. These observations helped me understand how drug use practices changed throughout the festival's events, times, and days. It also provided insight into community behavior.

While conducting observations and engaging in informal conversations through these activities, I used my phone to record short notes that I later used to write detailed field notes in a word document. I also took photos to capture the environment of the music festival and fill in the gaps in details of the setting in my field notes. The compiled notes totaled 319 single-spaced pages containing my observations, informal conversations, and photos collected using this method. I used this document in the qualitative data analysis.

Utilizing participant observation allowed me to collect data to address gaps in the literature and identify some of the critical components of the chemoethnography and the chemosociality of psychedelics. One gap in the literature is a lack of examining the context of psychedelic experiences. Capturing these elements requires studying psychedelic use within context. The data collected through my observations identified the contextual assemblages of

these experiences, such as the drug, set, setting, and practice of psychedelic use at music festivals. These notes on the drugs people used and where and how they used them helped me define the relationships between the drug, setting, and practice. Collecting photos and observations on the layout of the festival and the physical and social environment provided context to the setting where these experiences occur. Thus, these observations find how these individual pieces of the context come together as entangled assemblages. Additionally, this method questions the processes that occur in creating transformative experiences. Informal conversations amassed short narratives of psychedelic experiences and provided an opportunity to question participants about what made the experience valuable, essentially asking what processes took place to make the experience meaningful for them. Observing the settings and practices of use reveals the “technologies of perception” (Rajagopal 2001), such as the drug, set, setting, digital media, audiovisual art, and the process of transformation, such as pleasure, liminality, and *communitas*. While this method does not collect data on each aspect of chemoethnography and chemosociality, it is a practice of “studying matter in relation” that reveals the context of everyday psychedelic use resulting in transformation (Abrahamsson 2015:13).

Methods: Narrative Interviews

Narrative interviews are unstructured interviews that allow participants to speak about the details of their personal experiences while providing insight into perceptual influences on the experience, including personal history, religious and political ideologies, and timelines and locations of events (Bernard 2011, Schensul and LeCompte 2013). In conjunction with narrative interviews, I engaged person-centered interviews and techniques. These interviews are a mix of

open-ended probes and specific questions to collect data representing subjective human behavior and interpretations of personal experience (Levy and Hollan 2014). I started interviews with demographic questions, then used the unstructured interviewing method to prompt participants to describe their most transformative psychedelic experience at a music festival.

Then I used person-centered interviews and additional near-experience interviewing techniques guided by a semi-structured interview guide (Appendix I) to ask questions to clarify the details of the narrative. Semi-structured questions included the drug, dose, and the setting of the drug consumed, who was present for the experience, what was the intention of taking the psychedelic, physical sensations and thoughts during the peak of the experience, what contributed to making the experience transformative, and how was it transformative. The participant observation informed the use of some of these questions, such as who was present during the experience. In addition, interviews included additional unstructured questions based on participants' responses. For example, some unstructured questions included how long they knew the people they were with, whether they had tripped with them before, what was similar and different about them before the experience compared to after, and how the sensations of feeling the music contributed to the psychedelic experience. Additionally, I encouraged participants to share non-transformative psychedelic experiences at and outside music festivals for comparison.

The format of the interviews used specific interviewing techniques to examine psychedelic experiences beyond a recall of a timeline of events. Experience-near interviewing methods help probe for details about narrative experiences. Practices of close questioning document the thoughts, feelings, and actions of an experience by asking *what were you doing, what were you feeling, and what was happening around you* (Lende 2005, Lende n.d.). This kind

of questioning elicits responses beyond the presentation of events of the experience and builds a framework for exploring sensorial anthropology. Sensorial anthropology “explores how sensations are experienced phenomenologically, interpreted culturally, and responded socially” (Nichter 2008:166). This perspective explains how drug use feels and its cultural perception through sensations of touch, smell, sight, taste, and sound (Duff 2007; Nichter 2008). This kind of data examines how drug use practices impact the drug experience described through the senses. This method also captures the often ignored presence of pleasure within drug experiences and how it contributes to creating experiences. Close questioning techniques provide the data required to analyze the sensory effects of the drug experience and provide insight into the cultural and social practices and meanings of these experiences.

A sensorial anthropological approach is also helpful for collecting data on ineffable experiences. While participants may struggle to describe their experience in terms of a series of events, using close interviewing questions can draw out the embodied psychedelic experience through descriptions of the senses. For example, using questions to understand how the music sounded, what the lights looked like, or how dancing felt provides sensory data that describes otherwise ineffable experiences. Recalling these sensory experiences is aided by encouraging participants to share photos, art, and other objects representing their experiences. For example, some participants shared tattoos inspired by experiences, art created during their experiences, and pictures of art they engaged with during their experiences. These methods are essential for capturing the ineffable nature of some transformative psychedelic experiences, which is one of the most significant challenges to collecting these kinds of narratives (Harris 2019). Additionally, these questioning methods are valuable to elicit evidence of Zinberg’s (1984) drug, set, and setting while moving beyond these classifications to collect data on how these factors

contribute to the sensory experience of psychedelic use. Moving beyond these classifications requires inquiring about the drug and dose, thoughts and feelings before, during, and after the experience, the reason for taking it at a particular time and location, how activities and the environment like art and music elicited thoughts and feelings, and types of social engagements. Probing methods are valuable in identifying drug, set, and setting factors and understanding how these factors merge to shape participant experiences in specific times and places and what meanings emerge from these experiences. Narrative interviews provide depths of information on practice and experience often overlooked in observations and surveys (LeCompte and Schensul 2010). Narratives are composed of events that create a beginning, middle, and end to the story, as well as beliefs, values, emotions, intentions, identities, attitudes, and motivations which embody the meaning of the lived experience (LeCompte and Schensul 2010; Loseke 2019; Mattingly 1994; Schensul and LeCompte 2013; Vindrola-Padros and Johnson 2014). Drawing on experience-near interviewing techniques, I collected data on the meaning of lived experiences beyond the storyline. Using these methods to collect narratives of transformative psychedelic experiences allows me to compare these experiences and meanings across different psychedelic drugs, at various events, and in diverse settings to document the gradient of experiences while understanding what makes them similar and different in their context and transformational meaning.

I collected 39 narrative interviews with 38 participants. Interviews took place in person and over remote phone and video calls. I recorded all interviews for analysis purposes with the participant's consent. The interview duration ranged from 29 minutes to three hours and 44 minutes. Most interviews were about one hour and 30 minutes. However, three interviews were longer than the average, lasting over 3 hours. The longer interviews often contained multiple

experiences from outside the context of music festivals. In some cases, they were more detailed than other participants' accounts of non-music festival experiences. In many interviews, participants also spent time processing their experiences and the meaning they derived from them. I did not inhibit participants from exploring the details of various experiences because I recognized the potential for these interviews to allow participants to process their experiences.

Table 4.1 describes the demographic statistics of the interview participants. The mean age of those who participated in the interviews was 31 years. The majority of the sample identified as males (55%) of Caucasian ethnicity (83%) and were single (71%). Most participants completed some college (30%) and had full-time jobs (69%). Some participants did not provide an exact annual household income, but the overall range was between \$9,000 and \$500,000.

Methods: Survey

The third method examined associations between contextual factors of psychedelic use and experiential outcomes using an online Qualtrics survey. These data complement the subjective experiences collected in the narrative interviews and observations. While the qualitative interviews provided detailed descriptions of psychedelic experiences, the survey collected quantitative data to examine general trends within the study population.

Participants could complete the survey online anytime and in any location that was most comfortable and convenient. All survey responses were anonymous and did not collect identifying information. The 53-question survey contained four sections asking participants to reflect on their most transformative psychedelic experience at a music festival while on LSD, psilocybin, MDMA/MDA, or ketamine (Appendix II). The first section consisted of demographic questions, including age, gender, ethnicity, marital status, education, employment

status, income, religion or spirituality, and political orientation. The remaining sections consisted of three tiers of questions relating to the most transformative psychedelic experience. The first tier presented multiple-choice and short-response questions on the context of the psychedelic experience, including the state the event took place in, the event attendance, the consumed drug and dose, influential factors on the experience, and the impact of the experience. The participant observation and interviews informed questions on drug use practices and the influential factors of the experience. This tier of questions provides insight into the contextual elements that potentially influenced participant experiences and are comparable to data captured in the observations and narrative interviews.

The second tier of questions included two questionnaires to evaluate the sensory and experiential aspects of the psychedelic experience: the 30-question Mystical Experience Questionnaire (MEQ) (Griffiths et al. 2006) and the Psychological Insight Questionnaire (PIQ) (Davis et al. 2021). The MEQ is a validated measure used in many clinical studies to evaluate if a psychedelic patient experienced a mystical or transcendental experience (Barrett et al. 2015; Bouso et al. 2016; Schenberg et al. 2017). The questionnaire measures four subscales: mystical (M), transcendence (T), positive mood (P), and ineffability (I). Fifteen statements measure mystical, six measure transcendence, six measure positive mood, and three measure ineffability. Table 4.2 outlines all 30 statements on the MEQ by subscale. Each statement asks participants to rate the degree to which they experienced the statement during their most transformative psychedelic experience using a 5-point Likert scale: 0=none/not at all, 1=so slight cannot decide, 2=slight, 3=moderate, 4=strong (equivalent in degree to any other strong experience), 5=extreme (more than any other time in my life and stronger than 4). The evaluation of mystical experiences is essential because the literature shows that transcendent occurrences are a specific type of

psychedelic outcome that can lead to profound personal change (MacLean et al. 2012; Nour et al. 2016).

The validated 23-question Psychological Insight Questionnaire measures acute psychological insight resulting from a psychedelic experience (Davis et al. 2021). The scale contains two subscales measuring Avoidance and Maladaptive Patterns Insights (AMP) and Goals and Adaptive Patterns Insights (GAP). Fourteen statements evaluate the AMP, and nine statements evaluate the GAP. Table 4.3 outlines the 22 PIQ statements used in the study by each subscale. Davis et al. (2021) found that the PIQ may provide insights into the psychological mechanisms resulting in the therapeutic effects of psychedelic use. The PIQ can explore the relationship between therapeutic benefits from psychedelic use and mystical and non-mystical experiences in conjunction with the MEQ. In clinical studies, insight experiences, as measured by the PIQ, correlate with positive outcomes in depressed patients and those with alcohol use disorder (Garcia-Romeu et al. 2019; Roseman et al. 2018). Understanding the associations between psychological insights and experiential outcomes is essential to defining the meaning of transformative experiences in the recreational setting and the mechanisms that make them possible. The PIQ uses the same rating scale as the MEQ.

The third tier of questions contained open-ended questions asking participants to reflect and describe the context of their psychedelic experience, the timeline of events for the most intense part of the experience, the physical and emotional sensations of the experience, and what made the experience transformative. The narrative interviews influenced the development of these open-ended questions.

Considering the length of the survey, I designed the survey using tiers to elicit the most basic information from participants in the case of low completion rates. This tactic provided

essential statistical data before proceeding to more in-depth questions like the questionnaires and open-ended questions. Of the 523 participants who started the survey, 485 were eligible to participate. Of the 485 eligible participants, 444 completed the demographic questions, 366 participants completed the context questions, 270 completed the questionnaires, and 212 finished the open-ended questions. Despite 485 eligible participants, about half completed the questionnaires. This attrition may be due to participants not being compensated for their participation and the survey length.

Data analysis included all eligible survey responses. The analysis replaced incomplete responses in Tier 2 (questionnaires) with the average response of the completed responses. Most survey participants are single (63.0%) Caucasians (81.0%) in their 20s and 30s (mean = 31.6, median = 29) who are in school (25.8%) or have some kind of post-high school education (62.6%) and work full-time (60%). Chapter 5 contains further demographic statistics.

Data Analysis

Qualitative Analysis

The analysis transcribed all 39 narrative interviews to some degree to capture the essence of subjective experiences. Additionally, the qualitative analysis included open-ended questions from the survey and observational field notes. The analysis did not link narrative interview data with survey responses for participants who completed both methods. The qualitative analysis consisted of inductive coding to determine codes and themes from the qualitative data across captured psychedelic experiences. Inductive coding is a bottom-up approach where the researcher creates codes by interpreting the data and helps generate new insights (Bernard 2011; Thomas 2006). While conducting interviews, I developed analytical notes that summarized and

reflected on each interview and related common themes between interviews. These themes and notes functioned as the basis for comparing commonalities and singularities among interview participants and their experiences. I grouped common themes within word documents with relevant quotes from participant interviews. I also employed a semi-deductive coding method looking for commonalities among demographics (age, gender, household income, religion, political orientation), type of drug (LSD, psilocybin, MDMA/MDA, ketamine, polydrug use), music genre (EDM, jam band, folk, bluegrass, psychedelic rock, mixed), and drug sensations (touch, taste, sound, sight, and smell). By combining the inductive and deductive codes, I found additional analytical patterns within the data, including practices of drug use, socialization practices, environmental factors (art, light, sound, space), the meaning of transformation, and psychological insight which inform the analysis and discussion of the research. One of the challenges to this method is that patterns across interviews emerge but may overlook individualities within interviews if they do not fit into emerging patterns. Additionally, inductive coding is highly subjective and leaves room for multiple ways of interpreting meaning from the data.

I used these analytical methods to uncover theoretical elements of chemoethnography and chemosociality, like the drug, set, setting, the processes of becoming, and the impact of psychedelics. First, I reviewed the data to identify the types of drugs participants took and then connected the drugs with their sensorial effects to understand the physiological effects. Using the data, I looked for patterns to answer questions about how each psychedelic changed sensory perceptions. Second, I coded interviews for data related to the set or mind frame of participants leading up to their experience. I coalesced sections of interviews that identified life events or mental and emotional struggles that participants mentioned before their experience or that played

a role in their experience. I grouped these events or emotions into categories, like romantic breakups, life transitions, and overcoming addiction. Third, I highlighted the key elements of the music festival environment that participants identified as impacting their experience. I identified themes like music and community playing pivotal roles in participants' psychedelic experiences. Fourth, I compared participants' definitions and meanings of transformative. I looked for patterns of similarity and dissonance. This piece was necessary for identifying the experience's impact on participants. It highlighted how this experience stood out to participants amongst a sea of experiences and overall defined what transformation means. Finally, I reconstructed each of these pieces of participants' experiences. I reconnected the drug, set, setting, sensory changes, and meaning of transformation to identify the patterns of becoming. As mentioned in chapter 2, these elements are deeply connected, and I cannot examine them entirely independently of each other. Separating each piece of the chemoethnographic puzzle allowed me to look for the patterns of these elements between participant experiences. Reconnecting the pieces allowed me to view the patterns within each of the experiences and understand the processes of becoming for each participant's experience.

Quantitative Analysis

I completed the quantitative analysis using SPSS 25. First, I analyzed the basic demographics using frequency tables, bar charts, histograms, and box plots. These analyzed variables included age, gender, ethnicity, marital status, education, employment status, annual household income, religion or spirituality, level of religiosity or spirituality, political orientation, number and type of music events attended, and drug use practices.

Then I calculated and analyzed the descriptive statistics for the total MEQ and subscale scores. Previous studies compute MEQ scores in two ways. One way is adding the Likert scale responses for all statements and dividing the sum by the total possible score. A second way is adding the Likert scale responses for each subscale and dividing the sum by the total possible score for each subscale. I calculated both sets of scores. Some studies define a mystical experience as scoring 60 percent or more on the total MEQ score, 90 or higher (Bouso et al. 2016). In this analysis, I follow Barrett et al.'s (2015) more rigorous definition of a complete mystical experience as scoring 60 percent or more on all four subscales. Using this scoring method, I grouped participants into one of two groups (yes mystical experience or no mystical experience) for comparative analysis. Additionally, I grouped participants into binary groups for each subscale based on meeting the 60 percent score. Then I compared the study population demographics using the mystical groups. I also compared demographic characteristics between participants who scored having a mystical experience and those who did not.

The survey included a ranking question, asking participants to rank the top three factors that contributed to making their experience transformative. I evaluated each element's role in creating a transformative experience using Smith's *S* salience Index. The salience index weighs the frequency of each item ranked by the average rank of the factors on the list provided to participants (Smith 1993). The salience rank of each factor is an indicator of the association with having a transformative experience. Factors with higher salience ranks are more often associated with having a transformative experience. Smith's *S* salience Index:

$$S = \frac{\left(\frac{(L - R_j + 1)}{L}\right)}{N}$$

Where *L* is the number of factors to choose from in the list, *R_j* is the average score for each factor, and *N* is the number of lists in the sample. The survey provided 12 factors for participants

to rank. Considering they only chose the three top factors, L was three instead of 12. I calculated the ranking for each factor three times. Once for the total sample ($n=331$), once for the mystical experience group ($n=127$), and once for the non-mystical group ($n=172$). I did not include all participants who completed the ranking question in the analysis. I dropped participants who repeated ranks for multiple factors.

I scored the PIQ scale based on other studies by summing all statements' response values. The total possible PIQ score is 110. Previous studies determine the scores for each subscale by adding the response values for each statement associated with each subscale. The total possible score for the AMP subscale is 65 and 45 for the GAP subscale. I conducted descriptive statistics on the total PIQ, AMP, and GAP scores based on the mystical subgroups.

Additionally, I analyzed the mystical experience groups using the AMP and GAP subscale scores. First, I used Student t-tests which test the difference between two means (Field 2018). I used Student t-tests to examine differences between the means for the mystical and non-mystical groups in their overall AMP and GAP scores. I also observed the differences between the groups for each AMP and GAP statement to determine which statements contributed to the differences. Second, I used Pearson's r correlations which provide insight into associated variables (Field 2018). I used correlations to identify potential relationships between AMP and GAP scores and the mystical experience groups. Third, I used logistic regression to predict categorical outcomes (Field 2018). I used logistic regression to test the AMP and GAP scores in predicting the likelihood of a participant having a mystical or non-mystical experience. The results of these analyses are available in chapter six.

Limitations

I provide another limitations section in the concluding chapter that reviews the limitations of the research data and findings. In this section, I discuss three limitations to implementing the methods of this research. First, the study anticipated interviewing participants at music events, but all interviews took place over a phone or video call or in person outside of music events. Conducting interviews outside the setting of a music event inhibits the power of place-based elicitation in describing experiences (Bloch 2018). Bloch (2018) describes them as extradiscursive narratives or “coded language and spatially contextualized gestures” (176). These verbal and physical cues are expressions of identity. Bloch (2018) describes place-based elicitation as the most effective technique for gaining authentic expressions of extradiscursive narratives. For example, when Bloch (2018) researched graffiti artists, he found that participants changed their body language and verbal expressions of their identities and activities based on the location of the interviews. Place-based elicitation argues that the location and context of data collection methods influence how participants present their experiences (Bloch 2018; Vindrola-Padros and Johnson 2014). Conducting research methods in a meaningful place to the participant allows them to express that space's meaning to the researcher (Bloch 2018).

In studying recreational psychedelic experiences, place-based elicitation requires interviewing participants in an environment where they have transformative experiences. Place-based elicitation allows examining “life as it happens at the intersections of multiple beings and things” (Ogden et al. 2013:10). The combination of place-based elicitation with experience-near interviewing and sensorial anthropology provides a framework for capturing and examining the assemblages of lived experiences. Considering no interviews took place at music festivals, the element of extradiscursive narratives is missing from the qualitative data.

Second, the recruitment and sampling approach creates limitations on the study sample. Focusing on people with transformative experiences can create a biased sample. Other types of experiences may be missed in the data making it difficult to generalize the research findings. For example, relating the findings to how people use psychedelics in everyday settings, implications for medical use, and management of other consumption practices like micro-dosing. I tried to control this limitation by questioning participants on other ways they use psychedelics, such as outside music festivals. I also asked participants to share adverse or non-transformative experiences. These additional experiences provide comparisons to transformative experiences and allow for more generalized applications of the research findings to other practices of use.

The third limitation of the data is how I used the PIQ in the survey. The last statement of the survey, “realized the point of view or actions of others that had been difficult to understand previously,” is absent from the survey. The omission was an oversight error, and I did not realize it until several participants completed the survey. I considered adding the statement to the questionnaire but could not justify how to analyze the overall PIQ scores for those who completed the last statement and those who did not. This omission only affects participants’ overall PIQ and AMP scores because the statement measures the AMP subscale. It did not impact their GAP score. There are 14 AMP subscale statements compared to nine GAP statements. When analyzing differences between the mystical groups, I looked for differences in each subscale statement to determine which statements contributed to the differences between the groups. Focusing on each statement reduces the impact of one missing statement on the overall PIQ or AMP score.

In addition to these limitations, positionality is arguably another limitation. I provide further discussion on this topic in chapter nine under the section titled “A Reflection on Conducting the Chemoethnography of Recreational Psychedelics.”

Considerations in Representing Other’s Experiences

Proper representation of subjective psychedelic experiences is essential. Misrepresenting others' experiences can create a sense of alienation or othering of the people who recreationally use psychedelics and the community. This study uses verbatim quotes from participant interviews and member checking, acknowledges the heterogeneity of subjective narratives, integrates a phenomenological approach to participant experience, and considers researcher self-reflexivity to prevent misrepresentations.

First, verbatim quotes are representative of other people’s subjective experiences. Participants express themselves in specific ways to convey personal meaning. Recreating subjective experiences with verbatim quotes brings these meanings to readers. Altering quotes, such as correcting grammar, changing the deliberate presentation of the self, the message, and the importance of the experience conveyed by the participant is a form of misrepresentation (Markham 2004). For in-person interviews, it can also be valuable to include context elements in the presentation of quotes, such as extradiscursive notations. These notations are nonverbal expressions from the participant that illuminate the meaning and can be insightful in recreating an interview scene for readers (Bloch 2018). Incorporating context into subjective presentations moves beyond describing *what* the experience is to *what* the experience means to the participant (Harris 2019:131). Additionally, implementing member-checking methods during data collection can ensure that the researcher understands and authentically represents a participant’s

experience. For example, during narrative interviews, I often summarized what participants shared to confirm that I understood what they conveyed. Another form of member checking used in narrative interviews was asking participants the same question multiple times to check the accuracy of their answers.

The second consideration of subjective representation is the heterogeneous nature of experience. There are infinite possible perceptions of a subjective experience, and each is unique and personal, so the presentation of subjective experience should reflect this diversity. It is important to note that the data only represents the study participants and does not represent collective narratives (Jacobs-Huey 2002; Moore 2004). Thematic trends and patterns can connect individual experiences but cannot speak to the study population's collective experiences. Research results and the presentation of others' experiences must convey the heterogeneous nature of subjective narratives to avoid misrepresenting the population.

The third consideration is integrating a phenomenological approach to focus on participant experience. A common practice in drug research is to remove the person who uses drugs as an active agent of inquiry, posing them as "isolated, passive and decontextualized individuals" (Hunt and Barker 2001:169). Phenomenology provides a framework to recenter participant knowledge as the primary data source. The premise of phenomenology takes the subject's perceived reality as the true reality of nature (Sjöstedt-H 2015). Understanding subjective experience requires getting "into the native's head" (Laughlin n.d.). One challenge to a phenomenological approach is overcoming the dichotomy between the mind and body or thoughts and feelings. Conveying and understanding the emotions of an experience is not enough from the phenomenological perspective. Wikan (1991) argues that the only way to understand subjective experience is to overcome the mind-body dichotomy and engage with feeling-thought,

or the blurring between mind and body in an experience. One way for researchers to traverse this boundary is to engage in participant experiences; otherwise, it is impossible to accurately describe participant experiences, even when using a phenomenological approach (Takahashi and Olaveson 2003). One of the shortcomings of using a phenomenological approach and leaning on subjective descriptions of psychedelic experiences is the privilege given to language in describing things that may not be fully comprehensible through words. This is especially true for ineffable experiences. Additionally, researchers' subjective descriptions of observations and experiences are subject to interpretation and may not fully capture lived experiences, even when combined with detailed descriptions provided by participants.

Along with assigning agency to participant experiences, I couple the phenomenological approach with using person-first language. Pejorative language, like “drug user” or “drug addict,” centers a participant’s identity around the act of using a drug and stereotypes around drug use (Broyles 2014). To assign agency over identity to participants, I replace pejorative language with first-person language, like “someone who uses psychedelics.” When a participant uses the term “drug user” or “psychedelic user,” I quote them verbatim or use those terms in conversation with each other but otherwise use person-first language.

The final consideration is the practice of self-reflexivity in the presentation of data. Self-reflexivity means recognizing the role of the researcher and the research context on the kind of data collected, its analysis, the presentation of results, and implications on the study population (Hunt and Barker 2001; Jackson 1989; Marcus and Fisher 1986; Ross et al. 2020). Without reflexivity, researcher authority, ethnocentrism, and judgment can override subjective experiences and reinforce othering and misrepresenting people who use drugs (Desjarlais and Throop 2011; Harris 2019). Again, a phenomenological approach to presenting subjective

experience can assist in self-reflection and prevent misrepresenting others' experiences.

Triangulation is another valuable technique for self-reflexivity in data analysis (Page and Singer 2010). Researchers can consider using quotes and member checking, diverse experiences, phenomenological perspectives, and self-reflexivity to avoid misrepresenting subjective experience.

Ethical Considerations

The American Anthropological Association's (AAA) Code of Ethics (2012) is the professional principle that guides my ethical decisions. The AAA Code of Ethics states, "Anthropological researchers have primary ethical obligations to the people, species, and materials they study and to the people with whom they work" (2012:2). These obligations include doing no harm and promoting participants' safety, dignity, and privacy and other individuals involved in the project. In addition, this project considers the ethics of confidentiality and consent.

Confidentiality protects the identities and information collected about research participants (Whiteford and Trotter 2008). This study de-identified all collected data, so no data is traceable to the participants. This practice includes using pseudonyms and coded numbers for participant names, removing identifying information from tape recordings, asking subjects to alter individuals' names in interviews, and not collecting IP addresses (Fitzgerald and Hamilton 1996; Johnstad 2018; Page and Singer 2010; Zinberg 1984). I took additional measures to protect participant identity during remote phone and video calls by using an end-to-end encrypted application, like Signal, for communication. To preserve participant email communications from public records laws, I encouraged participants to email me through a private email address. Also,

I do not name any event producers, organizers, or property owners in publications to protect their confidentiality. Finally, I applied for a National Institute of Health (NIH) Certificate of Confidentiality as an extra measure to protect participant confidentiality. Unfortunately, the NIH denied my request.

The AAA Code of Ethics (2012) states that researchers should obtain informed consent from all study participants before carrying out any data collection methods. Some essential elements of informed consent include the potential harms and benefits of research participation, the ability to withdraw consent, the location and accessibility of the research data, and plans for disseminating research results. This study considers four elements of consent: verbal consent, consent while intoxicated, withdrawing consent, and consent of event organizers and property owners.

First, this study required verbal consent to protect participants. Many researchers argue that written consent creates additional risk and harm for participants by creating physical evidence linking them to research activities (Page and Singer 2010; Sandberg and Copes 2012; Zinberg 1984). Written consent can be especially harmful to vulnerable populations who engage in criminal activity, like gang violence or illicit drug use. This study used verbal consent for narrative interviews to protect participants, which involved a notation that each participant consented to be in the study. For the survey, participants consented by responding yes to the question “do you consent to participate in this study” after reviewing an informed consent form.

Second, this study did not ask participants to consent to study activities while under the influence of an illegal drug. Sandberg and Copes (2012) argue that “if the point of ethnography is to see the life as it is lived and made sense of by participants, the costs of inebriation may be offset by witnessing this bit of their lives” (184), meaning it may be beneficial to interview

people while under the influence because it can provide unique perspectives otherwise unobtainable. Despite this benefit, this project recognizes participants' rights to consent while sober. For individuals interested in participating in the research while under the influence, I provided them with my contact information to schedule a time to complete the consent process and study activities.

Third, consenting to participate in the study was voluntary. Participants did not have to consent and could withdraw their consent in the study, even after the data collection period ended. Additionally, interview participants could choose not to have their participation recorded. Some drug researchers argue that recording interviews creates fears that the researcher is an undercover law enforcement officer (Sandberg and Copes 2012). At the same time, recording interviews is critical for adequately representing the participants' narratives. To resolve this conflict, participants had the choice to be recorded. Furthermore, participants could decline to answer any question during the interview without explanation or request that I omit any harmful or embarrassing information in the study (Pawelz 2018; Zinberg 1984). Also, participants could stop the recorder and discuss any topics "off-the-record" as desired (Zinberg 1984). Although consent existed before data collection began, participants could withdraw consent at any time during and after the data collection period.

A fourth ethical consideration was asking for consent from event organizers and property owners to conduct research at each event. This form of consent proves to be a serious ethical dilemma. Because of the RAVE Act, property owners and event organizers are legally liable for drug-related harm and deaths during an event if they know about drug use. A researcher's known presence at a music event is enough evidence to find event organizers and property owners liable under the RAVE Act. By agreeing to have a researcher conduct drug research at an event, the

event organizers and property owners open themselves to legal repercussions. This situation also makes them less likely to consent to the research activities. On the other hand, if the researcher does not seek consent for research activities, it reduces the risk of possible legal ramifications for the event organizers and property owners. Simultaneously, it restricts the agency of event organizers and property owners to consent. I did not ask any event organizers or property owners for consent to conduct research at their events to remedy this dilemma.

Summary

Despite having no incentives for participating in the study, people were eager to engage, as supported by the number of interviews (n=38) and started survey responses (n =444). In addition to the 38 interviews, I compiled a list of over 120 people interested in being interviewed. This high participation and interest rate may be due to people in the community wanting to share their experiences and finally having an outlet to do so. When recruiting for the study, some people expressed their excitement in seeing someone doing research of this kind. They felt like no one from the academic community, or the outside world was interested in their experiences and understanding what these substances and the music scene mean to them.

The mixed-methods approach of this study using observations, interviews, surveys, and personal experience is standard in drug research (Clifford 1986; Harris 2019; Jacobs 1999; Moore 2004; Rigg 2018; Sandberg and Pedersen 2009). At the same time, these methods weave into a complex web to address three main gaps in the existing literature on psychedelics: a lack of contextual understanding of everyday psychedelic use, the role of pleasure in creating exceptional experiences, and the meaning of transformational experiences. I use participant observation, informal conversations, and narrative interviews to collect data on the drug, set,

setting, practices, and processes of psychedelic experiences. The survey provides complementary data to quantify the drug and setting of these experiences. This method also provides deeper insight into one impactful psychedelic experience, the mystical experience. Executing these methods using a chemoethnographic perspective is essential to coalescing the individual elements of transformative psychedelic experiences. Further, the analysis defines the relationships and meanings of these elements in conjunction with each other. The analysis captures the complex web of drug dose, sensory changes, physical and social environmental components, mental state, identity characteristics, pleasure, processes of becoming, and definitions of transformation to uncover the human-chemical relationships of psychedelic experiences. The ethnographic side of chemoethnography comes from using mixed ethnographic methods. The chemical component comes from directing these methods to capture and analyze data of complex relationships and intra-actions between humans and psychedelics.

Have you had a transformative psychedelic experience at a music event?

If you are 18 or older, you may be an eligible psychedelic
research participant.



I'm looking for adults, 18 years and older, who believe they have had a transformative experience on LSD (acid), MDMA/MDA (ecstasy, molly, sass), psilocybin (shrooms), or ketamine (k) while attending a music festival or event.

Many individuals have transformative experiences at music festivals. This research seeks to understand what influences these experiences.

Participants will be asked to anonymously participate in:

- A single 1-3 hour interview and/or
- A 30-minute online survey (scan the QR code to take the survey)



Location

- A comfortable and private location determined by you (ex. campsite, video call, phone call)

Are you eligible?

- 18 or older
- Had a transformative psychedelic experience at a music festival/event

Benefits

- There is no cost to participate
- Adding to a growing body of knowledge on psychedelics

For more information call, text, signal, or email
Gabrielle Lehigh
usfresearch7@gmail.com
717-318-7631

IRB: 002064

USF UNIVERSITY OF
SOUTH FLORIDA
DEPARTMENT OF ANTHROPOLOGY

Figure 4.1 Recruitment flyer featuring the scope and purpose of the study, eligibility, ways to participate, a scannable QR code to the online survey, and my contact information

Table 4.1 Demographic Characteristics of Interview Participants

Characteristic	Mean or % of N	Characteristic	Mean, SD, or % of N
Age (n=37)	Mean = 31 Range = 18-55	Education (n=35)	
		Some high school (no GED/diploma)	3%
		High school diploma/GED	6%
		Some college or university (no degree)	30%
		Associate Degree	9%
Gender (n=38)		Bachelor's Degree	23%
Male	55%	Master's Degree	23%
Female	45%	PhD or other professional degree	6%
Ethnicity (n=37)		Employment Status (n=31)	
African American/Black	3%	Employed full time (40 or more hours per week)	71%
Asian	3%	Employed part-time (up to 39 hours per week)	6%
Caucasian	83%	Unemployed	19%
Latinx or Hispanic	11%	Unable to work	4%
Marital Status (n=36)		Annual Income (n=30)	
Single (never married)	69%	Range =	
Married or in a domestic partnership	19%	\$9,000-	
Separated	6%	\$500,000	
Divorced	6%		

Table 4.2 MEQ Statements by Subscale

Mystical (M)

Gain of insightful knowledge experience at an intuitive level
Feeling that you experienced eternity or infinity
Experience of oneness or unity with the objects and/or persons perceived in your surroundings
Certainty of encounter with ultimate reality (in the sense of being able to 'know' and 'see' what is really real at some point during your experience)
Freedom from the limitations of your personal self and feeling of unity or bond with what was felt to be greater than your personal self
Sense of being at a spiritual height
Experience of pure being and pure awareness (beyond the world of sense impressions)
Experience of the insight that "all is one"
Experience of oneness in relation to an "inner world" within
Sense of reverence
You are convinced now, as you look back on your experience, that in it you encountered ultimate reality (that you 'knew' and 'saw' what was really real)
Feeling that you experienced something profoundly sacred and holy
Awareness of the life or living presence in all things
Experience of the fusion of your personal self into a larger whole
Experience of unity with ultimate reality

Transcendence (T)

Loss of your usual sense of time
Loss of your usual sense of space
Loss of your usual sense of where you were
Sense of being 'outside of' time, beyond past and future
Being in a realm with no space boundaries
Experience of timelessness

Positive Mood (P)

Experience of amazement
Feelings of tenderness and gentleness
Feelings of peace and tranquility
Experience of ecstasy
Sense of awe or awesomeness
Feelings of joy

Ineffability (I)

Sense that the experience cannot be described adequately in words
Feeling that you could not do justice to your experience by describing it in words
experiences

Table 4.3 PIQ Statements by Subscale

Avoidance and Maladaptive Patterns (AMP)

Awareness of uncomfortable or painful feelings I previously avoided
Discovered I could explore uncomfortable or painful feelings I previously avoided
Awareness of dysfunctional patterns in my actions, thoughts, and/or feelings
Realized the nature and/or origins of my defenses or other coping strategies
Realized how current feelings or perceptions are related to events from my past
Discovered a clear pattern of avoidance in my life
Gained resolution or clarity about past traumas or hurtful events
Gained a deeper understanding of events/memories from my past
Realized I could experience memories previously too difficult to experience
Discovered how aspects of my life are affecting my well-being
Realized ways my beliefs may be dysfunctional
Discovered clear similarities between my past and present interpersonal relationships
Realized how critical or judgmental views I hold towards myself are dysfunctional

Goals and Adaptive Patterns (GAP)

Realized the importance of my life
Awareness of information that helped me understand my life
Discovered a vivid sense of the paradoxes in my life
Awareness of my life purpose, goals, and/or priorities
Discovered new actions that may help me achieve my goals
Experienced validation of my life, character, values, or beliefs
Gained a deeper understanding of previously held beliefs and/or values
Discovered new insights about my work or career
Awareness of beneficial patterns in my actions, thoughts, and/or feelings

CHAPTER 5:

JOURNEY DOWN THE RABBIT HOLE

Introduction

Journey down the rabbit hole. Step through interdimensional portals of time and space. Swim amongst the stars and surf along the galaxies. Venture to unseen worlds and traverse the boundaries of reality. Entering the world of music festivals is nothing short of an otherworldly adventure. This chapter presents a riveting ride through the intergalactic playgrounds that are music festivals. First, it paints the experience of the festival grounds by applying layers of details on stage production, art, vendors, and workshops. These crafted spaces mirror what Kyriakopoulos (2021) calls dreamworlds and soundscapes and play a pivotal role in drug use practices within the festival space. The second part of this chapter molds the makeshift organisms and societies living within it, exploring what they wear, what they do, and how they establish a community. Bringing together the otherworldly context of music festivals with the social lives of festivalgoers reveals the chemosocial relationships that emerge from these entanglements.

The data presented in this chapter derive from observation notes collected from informal conversations, participant observation, social media posts, and personal reflections. The purpose of these observations was to record descriptive notations on the physical and social environment of music festivals to understand further how they relate to and impact the psychedelic experience. These notes mainly represent my experiences and perspectives on music festivals.

Where applicable, I include details or quotes from informal conversations or social media posts to support my reflections and observations. I edited some of these quotes, recounts, and social media posts for clarity and length.

The Music Festival Grounds

Each music event is unique in its size, layout, and otherworldly spaces created within them. Some events are large, covering over 800 acres of camping, nature trails, multiple stages, and large art installations. Other small festivals provide only one or a few stages and limited camping areas. However, no matter the size of festivals, it is common for them to have diverse spaces. For example, some festivals provide secluded camping spaces for families with children or particular areas for workshops.

One festival designated and named each of these areas accordingly. The Conscious Kids Camp provided children-friendly activities throughout the festival, like face painting and flower crown crafting. Next to it was the family camping area, allowing undisturbed sleeping at night. This same festival also featured different areas for hosting consciousness-related workshops throughout the event. The Healing Sanctuary was a large-framed metal pyramid where people sat on rugs, chairs, or yoga mats. The Ancient School of Mystery was a big white circus tent, and inside was grass with a table or maybe an altar at the front. The Chapel of the Sacred Arts was another large white circus tent but had no walls leaving it open on the sides. The Galactic Guru Stage was a permanent stage at the festival site, but its proposed use changed for different workshops and events over several days. The first night the stage had a crafted dragon-like creature hanging from the roof and a small table; on another night, it had just a folding metal chair. The Sacred Fire and Drum Circle had a large fire area with massive logs stacked where

people gathered late at night to play drums and dance around the blazing fire. The Buddha Garden featured Tibetan Peace Flags, large pieces of selenite sitting around in a circle, and a Buddha statue sitting near a tree. The festival crafted each of these spaces for festival attendees to participate in different activities throughout the event.

Other festivals provide spaces away from music, lights, and stimulating elements of the event. One smaller event had wooded and shaded paths and roadways through the main camping area, allowing people to leave the lights, music, and sound when overstimulated. One grassy path led to a lake, revealing a magnificent show of swarming lightning bugs at night. Another festival created a bamboo garden, quiet with low lighting, benches, and hammocks to sit secluded from the large crowds. The area also featured a bamboo tea house and art murals. This same festival created additional sitting areas for people to relax, including a large wooden structure with hammocks hanging and a big net that people could sit in. This area was popular at night when people would gather in “cuddle puddles.” Finally, another festival set up seating areas using pallets with cushions that overlooked the water and live painting artists.

Festival attendees also create spaces for themselves and others to enjoy throughout the festival grounds. For example, it is common for people to hang hammocks between trees, especially near stages, art installations, and in quieter areas of the festival. Some people leave their hammocks hanging so others can use them if needed. At one festival, a particular group sets up an entire area within the campground that is open to anyone to hang out during the festival. It is a site meant to create a relaxing space with everything people miss from home while camping, like couches, tables, rugs, snacks, music, and musical instruments. They set it up underneath a gigantic orange, green, and white parachute suspended with bungee cords in the trees. There are

also some hammocks, and people bring their chairs. After the music ends at night, many people hang out in this area to listen to others play music and socialize.

Campsites

Another critical area festival attendees build is campsites. Choosing a campsite is one of the first and most essential parts of building a site. Everyone has different preferences for what they want in a campsite. Some priorities may include the size of the site based on how many people and tents need to fit in the area, the tree coverage, especially when wanting to sleep in a tent late into the morning or afternoon (no one wants to sleep in a hot tent), and the proximity to important things like the stages, food, bathrooms, and renegade sets (attendees who DJ or play in bands at their site after the main festival music ends). Some music festivals do not allow attendees to pick their campsite and instead assign spaces as they arrive. One festival provided 12' by 20' spots in massive fields with no shade, making it brutally hot when the sun came up, forcing many people out of their tents to sleep on the grass, yoga mats, or blow-up couches and air mattresses. Assigned campsites can prevent people from camping together if they do not arrive at the festival together.

Each campsite setup is different, making a beautiful and creative patchwork of tents, canopies, and decorations. People traveling from out-of-state or with less festival experience often have smaller sites with fewer amenities. As people attend additional events, they become more creative and find ways to make their campsites more home-like. Lush camps can have large colorful tapestries used to create privacy walls and shade. Tapestries cover an array of designs, including mandalas, fractal images, astrological symbols, tie-die, Grateful Dead art, and psychedelic art like mushrooms. A substitute for tapestries may be curtains, sheets, blankets, and

spray-painted tarps. Other decorations include colorful lights and lasers, rugs, bubble machines, and projection screens with psychedelic imagery. They can also have practical comforts, such as inflatable furniture, foldable tables and chairs, outdoor showers, camping kitchens, and dynamic speakers for playing music. Some people utilize their vehicles by converting vans to living spaces with beds and potable water tanks for bathing, cooking, and drinking. Site designs can become incredibly elaborate. At one festival, a group of friends set up a large closed-in carport and installed insulation and a window air conditioning unit. Inside the carport, they hung tapestries along the walls and had rugs and couches for people to hang out while a DJ played music. Part of the success in creating a comfortable site is teaming up with lots of friends and camping together. Each person brings different things, and everyone helps set up and decorate the camp, creating a crafted community living space for the weekend.

Stage Production

One of the main events of music festivals is the music itself, requiring event organizers to build functional and often aesthetically appealing stages for musicians and DJs. Individual elements go into stage productions, like lasers, lights, and fire. Each stage at each festival is unique and has diverse levels of production. For example, at a very small festival with only one stage, there were no lasers and no visualizer, only white, blue, green, and red lights in the shape of circles and squares that bounced around the stage, reflecting off the backdrop of a tapestry and roof of the stage. Other stages are more dynamic than others, with lasers and lights bouncing around the stage or room with single colors or multiple colors at different times. Smoke machines cross the laser beams as strobe lights flash across the crowd. Some stages feature projection mapping, where a projector shines an image onto parts of the stage, creating a sense of

movement to an inanimate object. For example, a wooden dream catcher was perched at the top of one stage with sacred geometry in the center and feathers hanging off the bottom. A projected image onto the dreamcatcher created the illusion that the feathers were flowing and the sacred geometry was spiraling within the dreamcatcher. Another stage featured disco balls hanging from the ceiling under a large canopy covering the crowd with bubbles streaming from bubble machines. As the bubbles drifted through the lights and lasers, they created an illusion of dancing reflections across the canopy and stage. Larger stages with well-known acts can have extensive light features or fire. For example, a band called Tame Impala played on the largest stage at a festival. During one of their songs, a massive circle of light fixtures descended from the top of the stage and hovered over the band, spinning and tilting in circles and then rising to the top like a giant UFO.

Other stages have large screens hanging at the back of the stage or on the sides displaying videos of the DJ, band, or graphic arts. These screens are visualizers and are prominent features of DJ sets. Visualizers as digital art existed in the 60s and 70s, but many visual displays were not digital. Instead, artists used overhead projectors with a water dish and poured in liquid colors, swirling them around into flowing psychedelic patterns. One small festival still uses this method. Today, digital visualizers can be simple and feature basic graphics like the spinning name of the DJ, a spiraling DNA strand, or a swaying forest image.

Visualizers are powerful because they can create an illusion of psychedelic imagery or emulate the visual changes experienced while on psychedelics, even when someone is sober. For example, one visualizer featured the name of the DJ and a diamond shape that moved or darted around the screen, similar to the visual “dartiness” experienced on MDMA. Other visualizers feature psychedelic themes, like vivid colors melting into each other like oil slicks, tribal

imagery, mandala-like designs, fractal images, and sacred geometry. Other artists feature psychedelic themes while playing psychedelic music. For example, the visualizer at one of Griz's sets showed an animated skeleton character riding on a psychedelic motorcycle (it reminded me of Grateful Dead's Psycho Sam) and rode inside the skeleton's head, displaying lots of trippy imagery with mushrooms and rainbows like acid. Earlier in the set, the visualizer revealed beams of color and eyes floating through them, coming out of the forehead of an animated head. Sometimes the visualizer featured sacred geometry or galactic images as if moving through space. At one point, an astronaut started swimming and then fell and was snowboarding through rainbow-colored space. On his spacesuit was the text "Griz." During the song "Vibe Check," he played the saxophone, and the visualizer showed rainbow colors with peace signs, flowers, Ying Yang's, smiley faces, and the words "Good Vibes All Around." This example emulates the immersive experience of psychedelically-themed art in conjunction with electronic psychedelic music.

Other visualizers align with the type of music performed by the artist. For example, the female DJ GG Magree often features demonic and sexually animated visuals. Similarly, female DJ Rezz shows pagan and satanic visuals reflecting her dark and techno sound. Other artists use visualizers to convey political messages. For example, the band Pepper featured a large white and blue screen with the words "NO WAR" on them during the early months of the Russian invasion of Ukraine. Another artist's set, Papadosio, showed an image of Earth overlaid by honeybees dancing around and then overlaid with a photo of Hurricane Maria. It portrayed a message about Earth, climate change, and ecosystem collapse. It did not say an explicit message with text, but it felt like it was trying to convey a message to viewers. Other designs feature artistic renditions of the music the artist is playing. For example, Griz played a song called

“Rainbow Brain,” with the lyrics, “dose-e do, trippy flow, brain is colored rainbow.” The visualizer showed an image of a rainbow-colored brain wearing glasses, a series of rainbow mandala figures, and the song lyrics.

Event organizers decorate stages to match specific themes or create a particular environment. One smaller stage, the Bazaar stage, was used for lesser-known bands. The area reflected the design of a Bazaar, featuring seating areas with large canopies framed with vibrant-colored fabrics and housing throw pillows, hanging ornate lanterns in the trees, and a round wooden trading hut where people could trade things like jewelry and buy pickles. Another stage centered on the idea of Area 51 and aliens. The stage looked like a spaceship. It had three tiers or levels, and the DJ stood at the top. The lower tiers had circuit-like designs all over them that would light up in different colors. Finally, a stage along a lake beach featured a giant art installation. It had a tower-like pillar in the center with sunshades reaching out over the crowd sitting by a stage decorated with brightly-colored psychedelic art.

The way musicians frame their music and interact with the crowd is part of the stage production. Some musicians follow a pattern of how they organize their shows. For example, the Grateful Dead (and many Grateful Dead cover bands) have a specific structure to their shows. There are always two sets. The first set is tame and contains songs consumed by lyrics. The last song of the first set goes into a lengthier jam session, where the band goes into a long improvisational jam, indicating the upcoming set break. The second set is more flowing and unrestricted, with less emphasis on the lyrics. They are still part of the songs, but more focus is on the jam sessions. Shows are typically 3 hours long with a 15-45 minute set break. Toward the end of the show, they play the last song and then walk off stage for a few minutes to return for an encore of one or two songs. Some Grateful Dead-inspired artists, like cover bands and Billy

Strings, follow a similar pattern. Other non-jam band touring artists, not at festivals, may not follow this pattern. Instead, they have multiple upcoming artists open for them before playing their one-hour set at the show's end.

Festivals are much different. Each artist is given about 45 minutes to one-and-a-half hours to play a set. The length of the set depends on their place in the lineup. Sets earlier in the day receive less playing time than late-night headliners. Musicians can also change how they play their music to meet the needs of people. At one set, a DJ played the entire set with a fast tempo, and at times he changed different parts of the music to manipulate the crowd in different ways. There were times when the music was loud and very house-like EDM. Other times it was softer, still a fast tempo, but softer. During these times, people did not jump around but relaxed and swayed back and forth more. This practice by DJs to read the crowd and alter their music to create different experiences for the audience is an example of technoshamanism.

Another example is how musicians interact with the crowd, such as telling them to put their hands in the air or speaking directly to the audience. For example, one artist stated to the audience, "Everything you need is inside of you. It's up to you." Even when DJs do not speak to a crowd, sometimes, they will sample words or lyrics from another song or a person to convey a message. Sampling is when a DJ takes a sample or piece of another song and reuses it in a new song. For example, one artist sampled the phrase, "this is the dimension of imagination," and later stated, "Are y'all ready to go to outer space with me right now." At the end of the set, he talked to the crowd and told them to take all the good energy back into the universe and share it with other people. At the end of the set, he screamed, "show love," and the crowd responded with, "spread love."

These individual elements of stage production come together with the performances of DJs, bands, and other performance artists to create immersive experiences for the audience. For example, some sets included technologically manipulated voiceovers to instrumental music. Phrases like “it just seemed so much easier before all of this” and “I know you’re going through things” portray an impressionable message to viewers. Another example combines performance art with stage production. At one festival event, organizers decorated the stage with blow-up pink and blue monster creatures and creatures with giant eyeballs coming out of the stage around the band. There were lots of lights on the stage. Strobes flashed into the crowd while rainbows of color zoomed across the stage, illuminating and darkening the performers. Many times during the set, dancers came out on stage. Sometimes they were break dancing. Other times, they were doing different types of dances. There were two fire dancers on either side of the stage spinning fire. They wore body suits with skeletons on them. Toward the end of the set, people started turning around, staring, pointing, and getting excited. As I turned around, I saw these two giant parade balloons. One was a Chinese dragon and the other a dinosaur. The dragon had purple legs, a purple face, yellow horns, and a yellow body with scales. The giant t-rex was standing on its hind legs. It was grey and brown and had defined lines on its body, showing its wrinkled skin, teeth, eyes, and claws. At one point, the tail of the t-rex was over the heads of the people around me. They started jumping to touch it as it swung up and down across the crowd. A giant spider web originated at some point and stretched out person by person across the mass of 25,000 people. The set ended with a cover of Elton John’s Tiny Dancer. At the song's end, fireworks burst into the sky from behind the stage as confetti rained down from the sky. This elaborate yet accurate portrayal is an example of how multiple individual elements, like lights, dancers, music,

parade balloons, confetti, and fireworks, collide into a creative and invigorating immersive experience for the audience.

Art

There are many art features at music festivals, and they all have different presentations and purposes. A common way people encounter art at festivals is through large free-standing murals. Much like the digital art created for visualizers on the stage, these murals commonly have psychedelic and consciousness themes. Some identifiable features include vibrant colors, elements of nature, mystical features and creatures, psychedelic mushrooms, repetitive and fractal patterns, integration of the human body, juxtaposition of male and female energies, meditation symbology, geometric figures, animals, crystals, space and planets, astronauts, and alien-like creatures. For example, one piece of art displayed a cat with three eyes imitating the psychedelic effects of visual trails while on LSD. The portrayal is as if the cat were moving, and the viewer sees a long trail pattern of the cat's eyes across the mural. Other murals convey subtle and unsubtle deep meanings. For example, a series of murals by one artist featured empowering phrases and statements of self-love to the viewer, such as "I am in control of my feelings," "I appreciate the process," and "I am worthy." Another mural at a festival featured a moth in neon colors with an inlaid image of sacred geometry or a honeycomb in the background. Someone commented on a social media page about the mural, "I loved this so much because the rosy maple moth symbolizes spiritual rebirth and joy in the darkest of times, and I had been seeing them a lot at home, and to see this at [the festival] was a HUGE sign that I was in the right place." This sentiment explains that viewers can find powerful meaning even when an artist is not explicitly conveying a specific message.

Art installations are another form of art found at festivals. These art forms feature similar themes to the mural art. For example, one festival exhibited a large wooden sculpture of a woman-like figure surrounded by flowers, vines, and plants. I interpreted the piece as a representation of Mother Nature. Another art installation was a two-story pyramid covered in murals painted by different artists. Some of the murals showed Maria Sabina (Mazatec curandero) with mushrooms, a tree covered in mushrooms with a fairy sitting on mushrooms looking at a bee, a person wearing sunglasses reflecting lasers as their mind opened with swirling light, a shadow of a person floating in space while being abducted by a UFO. There was an archway on the pyramid where people could enter. Inside were white walls and whiteboards that people could write and draw on as interactive art. Other installations included small open-air structures painted with blue, red, and white Indian-like and ornate artistic patterns. Surrounding the structures were decorative posts. Between the posts and structures were strings decorated with recycled cans and metal pieces that made noise when blowing in the wind.

Festival attendees also create forms of installation art with totems. People carry around totems, which are tall posts with various creative things attached to them, as a way for their friends to find them in the large crowds. These totems are very useful when moving through a crowd of thousands of people in a large group. Some of the totems found at festivals included a baby Yoda strapped to a pole with a bubble gun, giant jellyfish made from clear umbrellas and iridescent streamers hanging off of the brim of the umbrella, a children's fishing rod with a balloon attached to the end of the line that could be "cast out" and reeled back in, a photo of SpongeBob and the quote "You like dirty bass don't you Squidward," a volleyball with a bloody handprint on it and sticks sticking out of the top like Wilson from the movie *Cast Away*, an inflatable penis, a picture of a hyena from *The Lion King* movie with his face filled with a tie-dye

spiral, a flag with Joe Rogan's face composed of different images (a third eye, UFO and planets, another person's face, pyramids, mushrooms, and a peyote button), and a picture of SpongeBob with the word Kevin underneath. The SpongeBob totem is unique because it illuminates a cultural joke. Almost every festival I attended always had green alien balloons; it is a cultural practice to call these aliens Kevin. The cultural joke is that SpongeBob found Kevin, an alien balloon, in the crowd. I noticed a repeat totem at multiple festivals: the "ass catcher." It is a net used to skim the top of a pool for leaves attached to the end of a long pole and the word "ASS" written on the net. People are creative with their totems to design something that relates to their friend group or represents the music festival culture while also serving a practical purpose.

Interactive Art

A large part of festivals is interactive art, primarily because being on psychedelics or other substances enhances how people perceive art, like when viewing murals or art installations, and how they interact with the art. There are different levels of engagement with art. Some art requires simple engagement, like having people walk through or stand in an exhibit. For example, one festival had a big geodome with white fabric across it to create a dome-like room. A small geodome was right next to it. The small geodome had a DJ playing house music. The big geodome had comfy couches, chairs, cots, and vibrating pillows. Participants would lay or sit on the furniture in the big geodome and look across the ceiling to watch graphic design projections move around the inside of the dome. The projection looked like a galaxy with different colored figures and objects floating in space. Someone used a controller to fly around the universe and enter the figures. Inside them, the viewer was viewing the galaxy filtered through the figure's

colors. In this instance, the participant interacts with the installation as a passive observer while also engaging in the space.

Another level of interactive art is when the participant actively creates the final artistic product. For example, a festival had a large canvas next to a board with the question, “how did you feel growing up in your household.” Participants painted their hands with whatever color corresponded with their response to the question (loved, encouraged, lonely) and added their handprints to the canvas. By the end of the festival, the canvas displayed a rainbow of handprints. Another interactive piece featured an installation of a giant monster. Around the base was a wooden frame painted with chalkboard paint and chalk for participants to draw a design. I stopped and added my contribution “+ > - ” and looked at what other people shared. There were names, peace signs, hearts, and song lyrics, among other things. Another interactive piece featured a wishing tree where people wrote what they wished for and tied it onto the tree. Some notes were, “Your story matters. You matter. Your feelings are valid. Be kind to yourself.” “I wish ALL crystals will find their way to me <3,” “To have the courage to always follow the thread,” “I wish for happiness with myself,” and “To get out of my comfort zone. Seek discomfort.”

Other types of interactive pieces allow participants to choose the level of engagement they want to partake. At one festival, an interactive space was titled “The House of Lost.” It is essentially a recreation of a church that is shattered or decimated. Upon entering through the arch to the church, there is a well with water falling from what looks like the broken and hanging chapel's steeple. Strings hang around the steeple, holding windows in midair, while red lighting glows around it, creating a demonic and sinister feeling. On a wall leading into the heart of the chapel is a sign that reads, “What we are doing to the forests of the world is but a mirror

reflection of what we are doing to ourselves & to one another, Mahatma Gandhi.” On another wall hangs a sign, “They came with a Bible & their religion. They stole our land & crushed our spirit & now tell us we should be thankful to the ‘Lord’ for being saved, Chief Pontiac.”

Constructing these walls are sticks, branches, and broken wooden window frames with spiderwebs perfectly and creatively intertwined. Inside the “chapel,” which is outside in the open, appears to be the inside of a church filled with pews and an altar. This space is where the main festivities of this interactive piece occur. There are floggings, weddings, vow renewals, engagements, musical performances, and a 2 am mass on Sunday. There is a sinister yet intriguing sensation to the whole place. Along the sides of the chapel were tiny houses hoisted up into the air on stilt platforms with stairs and ladders leading to second-story bungalows where people hung out and socialized with friends and strangers. When exiting through the back door of the chapel, participants travel through a makeshift “bar” where people can buy “House of Lost” memorabilia and continue through a long tunnel of sticks, spiderwebs, animal bones, and skulls. This artistic invention is fascinating because participants determine to what degree they engage with the art. They can simply walk through the exhibit and observe. They can also contribute through performance art by getting married, dancing to a band, or getting flogged to repent for their sins. Performing musicians also contribute to creating art by filling the space with music and adding a dynamic lay of artistic creativity. Festivals provide diverse experiences with art through murals, installations, and interactive pieces.

Art Production

Like event organizers have stage production, festival artists have art production. One particular festival is a prime example of crafting an elaborate and experiential space for

immersing festival attendees in art. This festival carves out a space at the center of the event to showcase all the varieties of available art. Along with presenting art, this space serves as an after-hours playground for people to hang out and listen to music after the feature acts end while still under the influence of recreational substances. The construction of art in this space combines murals, installations, and interactive art with stage production techniques. Large art installation pieces scatter the entire area. Some are stand-alone pieces, like a giant grim reaper paddling a boat. The boat has benches that people sit in and hang out with friends. Other pieces are statues with projection mapping. For example, a statue of a large ogre holds a bat while standing on a mound of human skulls at the entrance to this artful playground. Artists use the same process of projection mapping for the stages for the ogre to create a sense of movement to it, like his eyes are looking around at people. Lights and lasers project through the trees and, at times, merge with those originating from the stages. Moving images bring the ground to life with crawling spiders and slithering snakes. An additional after-hours stage radiates heat across the audience as fire spits into the sky with a DJ playing house music into the early morning hours.

A facet of this production is how art merges with space to create an artistic entertainment center for festivalgoers. Within the space is a lake. Artists use the lake to create a dynamically visual digital art and light show. A fountain in the lake's center creates a wall of water used as a projection screen to display the show. Lights and lasers bounce around the water's surface and into the trees. Ambient forest noises and music play in the background blurring the boundaries between art, nature, and self. Floating around the lake are massive light-up flowers shooting fire above the water, while realistic-looking swamp creatures crawl out of the water from the lake's edge. People watch the shifting lights and images while sitting in wooden seats and on blankets among the trees lining the lake. Next to this sitting area is a large geodome and hanging inside

are aerial yoga silks. Some people sit or swing while watching the show and others do aerial acrobatics. Covering the geodome is a blue cover. The silks streaming down from the undercarriage creates the image of a giant jellyfish. Elsewhere in the playground is the see-saw cock. A metal sculpture crafted into a rooster where people sit on either side and rock back and forth. In the center, the rooster tilts its head back and breathes fire. In secluded areas of the space are quiet sitting areas. Some are miniature cottage houses; others are teepees. These make nice “chill spots” for people that provide soft lighting and cushioned seating. People retreat to these areas throughout the event. It is a way to escape the intense stimulation of the festival and take a break. The additional stage in the area features house music. The DJ stands in the center with a metal triangle-shaped art installation piece welded together into a backdrop. On either side are metal triangle-covered geodomes where people walk inside. Hoops hang from the ceiling so people can swing and dance on them. To the far left of the stage is a metal head sculpture with a row of small flames on top reaching from one side to the other. Sometimes the fire roars into a blaze and the crowd cheers in excitement. Additional entertains set up a circle where fire dancers wield around fire poi, hula hoops, fans, and whips. On a far end of the playground is a mural maze showcasing mural designs by various artists. Additional murals scatter around the lake.

While this example creates an extravagant and monumental image of an immersive space, other festivals merge art and space differently. For example, one venue resides in a backyard tucked between a few industrial pole buildings. Someone with an unknowing eye may perceive it as an untamed property of weeds, but it more resembles that of a native and slightly wild botanical garden.

Upcycled, recycled, creative art fills the property. Some might call it trash, but it is a uniquely crafted display of juxtaposing treasures. There are pop-up canopies all over the yard

with mismatching furniture and tables sitting underneath them. There are various decorations strewn everywhere, with no specific theme for any particular canopy. Many have colored lights wrapped around the frames, flags, pride flags, and metal pieces of art made from upcycled kitchen utensils. One has a picture with an image of a person and the words “shit be melting,” which is an ode to psychedelic experiences. Beaded necklaces, old windows and picture frames painted and decorated with gems, small metal lanterns for tealights, random decorative stuff, almost like they went to the thrift store, picked out anything and everything, and threw it in the backyard. A crossing walk sign sits against the leg of a canopy with party bead necklaces around it.

A blue Halloween pumpkin treat-or-treat basket, a white figurine of a child on its knees praying, and a pineapple figurine sits in the decorative leg of a canopy. Outside one canopy is a piece of furniture. A small dishware or keepsake cabinet painted white and covered in dirt. There was no glass in the doors. Inside sit doll heads. Another sitting area featured lights, metal star-like sculptures, a white mannequin wearing a black and grey tutu, peace signs, a dog stuffed animal, a picture of Jesus, a canvas painting of a cat, a large metal heart sculpture, brass wind chimes, wall hangings of two lizards, a clothing rack from a department store, an oriental umbrella, a mirror, a set of old doors or windows with pictures taped to it, a wicker couch, a small triangle shaped table, a camping table painted red, and a folding metal chair painted green with a peace sign heart and blueberries. Decorations hang in the trees like wind chimes, ornate picture frames with no paintings, peace signs, things that reflect light, string lights, wreaths, and signs. The furniture is pieced together from whatever can be found, like old metal chairs from outdoor dining sets, folding lawn chairs, plastic lawn chairs, bar stools, wooden coffee tables, and wicker side tables. There are other sitting areas not covered by canopies. Some were by

fireplaces with people seated around them to keep warm. Another looks like a bar. It is curved and covered in art and signs. A sign behind it reads “Liber” and an artistic piece that looks like an abstract face.

String lights on the ground, artificial flowers in the trees, and stuck in the grass. Art is everywhere. Walking on the right side of the venue is a building covered in art. There is a koi fish and robots painted on the wall. A large table sits, painted with a robot wearing pink boxers with red hearts and white polka dots, made into a massive version of the game *Operation*, complete with a pair of kitchen tongs to pick up balls out of the holes. Another section has metal robots made of recycled materials and signs reading the robot laws: “Law 3 – A robot must protect its own existence as long as such protection does not conflict with the first and second law.” In the center of the yard sits an old VW bug with no windows covered in paint and stickers. Sometimes people just sit in there. Behind the sound stage are a bunch of round and square tables and chairs for people to sit and watch bands play. Plants and old-growth trees scatter the yard.

Next to the stage is a well-lit area with three canvases. Two are rectangular cardboard pieces, and one is a large round piece. Next to the canvases sit cinderblocks with paints and paintbrushes. People paint whatever they desire and contribute to the “community art.” People paint all kinds of things, and many of them psychedelic: amanita mushrooms, a giant eyeball with a rainbow swirling into an ocean wave, butterflies, flowers, planets, the moon, fish, sea life, a manatee, a dog, a cannabis leaf, a heart, a turtle, a sailboat, mushrooms with eyes, a gnome, a Dali face/mustache on giant lips, circles, swirls, and lines. These pieces are added to the existing artwork in the yard and hung up for people to enjoy at future events.

Hanging above the painting area is a vast round art installation with pieces of broken mirrors and reflective elements in silver and blue, spelling out the venue's name. On the left of the painting area is a large wooden piece of art with stacked teacups painted in different colors and styles, possibly resembling Alice in Wonderland. Behind the painting area is another canopy lit up with blue string lights. This one is specifically for musicians. Some of them hang out and play music long after their set and the music ends. Much like music production amalgamates the individual elements of the stages, art production blends various types of art in dynamic ways to create whimsical worlds for creative and artistic exploration.

Additional Features of the Music Festival

The art and music of festivals are two main attractions, but other features are essential to developing the festival environment. These features include vendors, workshops, and harm reduction.

Vendors play a significant role in the music festival scene. They sell the unique cultural artifacts of the space. Not all vendors or vending areas are the same. Music festivals have designated areas for vendors to sell goods. One of the festivals set up the vending area like a flea market, where all the vendors were under one giant tent, and people walked around the perimeter of the tent and meandered through the internal rows to ogle at the goods for sale. Not everyone can afford to pay a fee to sell their products officially. Instead, some sell their crafts around the campground areas, either directly at their site or by walking around sites. Sometimes single-day shows have no vendors. Sometimes there are vendors, but they are in informal vending areas. These informal areas are often in parking lots outside of amphitheaters and arenas where shows take place. Deadheads (Grateful Dead fans) created the term "lot" by selling their products in

parking lots. Another term is “Shakedown Street,” popularized by the Grateful Dead song. Most shows do not have a “lot” scene. Those that do are often influenced by or align with the Deadhead culture, such as Billy Strings or Dead and Company. Something unique about the lot scene is the practice of selling drugs. At other shows and festivals, drugs are not typically openly sold in the vending areas. Instead, people sell them in the campground areas. While walking around Shakedown at a show, it is common to hear the whispers or calls of “doses,” “mushrooms,” or “molly.” After the show, Shakedown is the place to find the “Nitrous Mafia,” a well-organized group notorious for selling copious amounts of nitrous balloons at jam band shows and music festivals.

No matter where vending takes place, commonly sold products are silver jewelry, art (stained glass, prints, paintings), kaleidoscopes, handmade patches, hemp clothing and products, band and DJ memorable and clothing, glass pipes, wire-wrap necklaces, handmade tie-dye, upcycled clothing, screen printed shirts and hats, stickers, rave outfits, vapes, fans, mass-produced tie-dye, and miniature spoons for sniffing drugs. Some products are specific to the type of music for the event, but a constant theme is psychedelics. For example, on “lot” at Billy Strings, a vendor was selling a vintage green corduroy vest with fabric sewn for pockets. On the back was a doily with an amanita muscaria mushroom patch in the center. Other novelties included Grateful Dead shirts, patches, and slingshots. Many vendors make and sell their own products, while some purchase and resell mass-produced products like jewelry, hippy clothing, and tapestries. Homemade products typically sell for more money than mass-produced items, but consumers do not mind spending money on a meaningful piece of work. For example, a vendor explained that someone had a mushroom trip in the woods where he saw rocks lying in a circle at the base of a tree and felt it connected him to the Earth. Later he went to a festival and found a

piece of art featuring a portal at the bottom of a tree and felt it resonated with his mushroom experience. He purchased the artwork without concern for the price because of its meaningful connection to his experience. The vendor reiterated that people buy things because of connection and meaning. In addition to craft vendors, food vendors are also an essential part of the festival. Some common festival foods are grilled cheese, tacos, vegan food, hot dogs, burritos, and alcohol.

Workshops are another feature of the music festival scene. Many people enjoy workshops to learn or practice new skills. Some festival workshops include learning about native plants for health ailments, harm reduction talks, yoga, EDM yoga, hula hooping, fire spinning, Kundalini chakra activation, sacred music and movement, sound healing, and cocoa ceremonies. For some people, workshops provide a way to achieve altered states of consciousness without substances or to prepare for entering an altered state of consciousness while at a festival. A unique workshop I attended while conducting participant observation was a cocoa ceremony and sound healing. A large group of about 30 people sat in the grass under a large white tent. I sat towards the back of the group on my yoga mat. Two women walked around, breaking up a large chunk of cocoa and handing a piece to each person. While passing them out, people introduced themselves and their intention for participating in the ceremony. A woman handing out the cocoa said an affirmation or prayer before instructing us to eat the cocoa. The ceremony was not long but gracefully transitioned into the next workshop on emotional freedom techniques with sound healing. We did many breathing exercises and moved our hands and arms along with affirmations. The woman leading the workshop played sound bowls during different parts of the experience. As we repeated the affirmations, she guided us to move our bodies. Most of the time, we were sitting. We would stretch our arms straight over our heads and bring them down to our

chest. For several minutes we repeated a series of affirmations accompanied by a series of tapping movements on our heads, then our foreheads, under our eyes, over our lips, on our chins, our chest, our sternums, outside of our hands, each finger individually, our wrists, and starting all over again with the head while repeating the mantras. In my experience, I felt very open and, in a sense, vulnerable to feeling and expressing my emotions. People talk about how cocoa opens the heart chakra, which makes sense considering cocoa contains Theobromine. This compound provides similar effects as caffeine, expanding the blood vessels and increasing blood flow throughout the body. During the workshop, the woman instructed us to focus on something we wanted to work through, deal with, or confront. That process of thinking, emotionally feeling, repeating the mantras, and allowing myself to embody what I was physically feeling along with the words I was saying created a sense of peace and healing. In a way, repetitive affirmations in the exercise functioned as a form of music. They have a sense of rhythm to them. The use of movement is a way of practice, a form of expression, similar to dancing at a festival. The diversity of workshops can present alternative or supplemental activities for people to explore and experience within the festival environment.

A final key element to the festival space is an observation on harm reduction. Not all festivals have harm reduction because of potential repercussions associated with the RAVE Act, as discussed in chapter three. The level of engagement differed between festivals for the ones that did offer it. One festival location partnered with the local fire rescue to provide and promote harm reduction practices for all their festivals. The program was born from experiences during past events where festival goers had negative drug experiences that resulted in overcrowding the small local hospital with emergency patients. According to an informant, many of these people ended up in the hospital because they were unresponsive after taking synthetic drugs. In some

cases, people would overindulge in drug use, have anxiety or panic attacks, or end up lost in the woods. Because law enforcement did not have the proper training to manage such situations, they often became involved in these instances resulting in unnecessary arrests. The current program, started about six years ago, now utilizes trained EMTs and RNs to work with anyone who needs physical or emotional support at a festival. Additionally, the program works to train the local Sheriff's department, First Aid responders, beer servers, and anyone working at the venue on how to manage any type of drug-related incident. The program also created a "calm down" space outside the main festival activities where anyone with a challenging drug experience can get the mental or emotional support they need. This program changed how deputies and emergency responders deal with festivalgoers at events. As a result, they better understand what people are going through and how their reactions to them can impact people's experiences.

Other festivals work with organizations like DanceSafe or Bunk Police to offer peer-based harm reduction services. These services can include providing free access to water and electrolytes, non-bias drug and harm reduction education, drug testing kits, on-site drug testing services, and other harm reduction products (ear plugs, condoms, candy). Other festivals that do not offer these services may still work to provide some level of harm reduction. For example, one festival promoted a message on the main stage visualizer in between sets stating the directions for seeking medical attention in an emergency and a reminder that people would not be penalized for reporting a medical emergency even when under the influence. Other organizations not explicitly focused on harm reduction can also be supportive. For example, an organization offered hand-outs on tips for maintaining festival stamina and avoiding festi-blues, which included suggestions like eating vitamin C, drinking lots of water, layering clothing and

making good sock and shoe choices, pre-making easy-to-eat nutrient-rich food, stretching every day, maintaining hygiene, getting some sleep, testing substances before taking them, and surrounding oneself with a supportive community.

Festivalgoers also practice harm reduction. While at festivals, some people carry Narcan (overdose reversal) in their bags. On social media pages, people posted harm reduction tips, including carrying Narcan in case someone in their social group or someone near them needed it. While at a festival, I found an unused and unopened nasal application of Narcan. This festival did not offer harm reduction services, showing that people practice harm reduction even if those services are unavailable to them at those events. Some people also bring test kits and offer to test people's substances. At one festival, someone asked for assistance in testing their cocaine, and a neighbor quickly jumped up to test it for them. The test was inconclusive, so the neighbor recommended additional support from DanceSafe to retest it. Another person asked me to test their cocaine, which tested as a methamphetamine-type substance, to which he proclaimed he now understood why it made him feel so "wiry." Another example of community harm reduction efforts is the group that organizes the hang-out site with couches, tables, chairs, and snacks to create the comfort of home. That space allows people to hang out late at night when they are still under the influence or using drugs. It is a safe and comfortable place to hang out and chill, and in the case of an emergency, someone is around to get help. Some festivals provide a level of harm reduction to attendees. Even in the cases where they do not, festival goers engage in practices of harm reduction for themselves and others in the community.

Age

The overall age of attendees at the music festivals I attended ranged from young children with their parents to older adults in their 70s. Noticeable trends emerge based on the size of the event and the type of music. Single-day shows for jam bands and Grateful Dead cover bands typically had individuals in their 40s or older. Venues located near college campuses additionally drew in some early 20s college students. EDM shows and raves typically had younger crowds ranging from 18 to mid-and late 20s. Multi-day festivals without camping also had different age groups based on the type of music. Again, EDM shows had younger age groups in their early 20s. Multi-day festivals without camping for reggae music were noticeably more diverse than other genres of music. They were still predominantly white but had a more comprehensive age range. There were more families present with younger children, some people in their 20s, but more in their 30s, 40s, and 50s. Large multi-day EDM camping festivals (over 25,000 people) drew in younger crowds from 18 to mid-20s, and many attendees were undergraduate college students. Large multi-day camping festivals (over 25,000 people) with diverse music (electronic and jam bands) attracted a broader age range. Families with young children still attended these events, but it was not as usual. Most people were in their 20s or early 30s, with a broad range of people into their 70s. Smaller multi-day camping festivals (under 5,000 people) with jam bands, bluegrass, and local musicians had more people in their 30s, 40s, and 50s, with some in their 60s and 70s. Smaller multi-day camping festivals (under 5,000 people) with ambient electronic music drew in more people in their late 20s, 30s, and 40s. Smaller multi-day camping festivals (under 5,000 people) described as transformative music and arts festivals had more homogenous representation across age groups than other festivals but ranged into the 70s and attracted couples

with young children under the age of 10. Overall, age cohorts coincide with different events' sizes and music genres.

What People are Wearing

Psychedelic and music culture have a specific style often reminiscent of an “I don’t care about the mainstream” counterculture attitude. This cultural essence creates a sense of individual representation within the scene. For example, it is common for women to act out against mainstream culture by wearing provocative or masculine clothing and not shaving body hair. The openness and acceptance of the community provide a space for open self-expression in how people present themselves in their style and what they wear. Some general trends encompass the overall psychedelic music culture, but there are also specific patterns based on types of music at different events. Typical fashions include clothing and accessories with psychedelic patterns or references, much like the art at music festivals. For example, many people wore space and galaxy-themed attire, digital psychedelic graphic art designs, sacred geometry, and mandalas. Someone wore a shirt stating, “Happy Trips and Candy Flips.” Candy flips refer to the practice of taking LSD and MDMA together. Accessories feature similar psychedelic-related art, such as hand fans that are popular for keeping cool while dancing. Some designs included melting mushrooms, digital fractal schemes, and a mouth with a tongue sticking out and a tab of acid. These types of artistic designs spread from clothing and accessories to body tattoos. Themes in tattoos include sacred geometry, mandalas, chemical compounds, galaxies and planets, and psychedelic references. One participant shared her tattoo of the famous graphic of Albert Hoffman riding a bicycle after dosing himself on LSD, leading to the annual celebration of bicycle day.

Another practice at music festivals is wearing creative costumes. Some costumes included a human riding an alien, an astronaut on a spaceship, a wizard, a knight, Jesus, a cat, and a guy dressed up in a pig outfit donning a pink tutu, pink pants, pink arm warmers, pink crop top shirt, and a pink pig face riding around on a bike making pig noises. Some costumes are store-bought, while others are more elaborate home designs. For example, someone dressed up as an old lady using wire-rimmed glasses, an oversized floral dress stuffed to create a large backside, and a grey wig wrapped in curlers. They used a walker containing a sign reading that they were looking for their dog. Standing behind them, one can see a stuffed animal dog wedged into their backside as if they had sat down on the dog and lost it. Another creative costume was a male dressed up as a mermaid wearing a red wig, a seashell bra, and a metallic green fin. Friend groups will collaborate and wear thematic costumes. This practice builds connections between friends while making it easy to find friends in large crowds and is a fun and creative sport. Sometimes groups create costumes around a general theme, like butterflies, cheetahs, mummies, pirates, cows, or mushrooms. For example, one group dressed like British colonists from 1400s England, wearing white wigs, white face paint, colonial jackets, tan breeches, and knee-high white socks with black shoes. Beyond their appearance, they performed the part, speaking with English accents and acting in character. While sharing my research flyer and explaining my project, none of them broke character. Other groups organize specific roles within costume themes. For example, a group assigned each person a character from the tv show *SpongeBob* and all dressed in character for one day. Another group role-played as characters from the Scooby-Doo gang.

While some fashion expressions permeate throughout the entire psychedelic music culture, there are specific facets within the music community. For example, at jam bands and

more spiritually conscious music, it is more common to see music-related jewelry, such as ankle bracelets composed of bells that jingle when people dance. This accessory was usual at a festival with a sacred fire circle and was part of the instrumentation of music along with the drum circle as people danced and moved around the fire. Another style seen at jam band shows and festivals is clothing that resembles a gypsy-like style, like flowing skirts and shirts, natural colors and earth tones (white, brown, green, blue), tie-dye, and body paint on the face and chest. More specifically, at Grateful Dead cover band shows, most people fully express their passion for the band, wearing multiple symbols of the Grateful Dead and their songs on patches, jackets, skirts, shirts, shoes, pants, hats, dresses, and pins. It is common for people not to wear shoes at shows for jam bands and spiritually conscious music. People at other festivals were barefoot, but it was typical at events featuring this type of music. Some people find it easier to dance without shoes, while others feel connected and grounded to the Earth.

The reggae festivals I attended had a more conflicting sense of style than other kinds of festivals. Part of it may be because it was a multi-day festival without camping and was highly commercialized. On the one hand, there were everyday, mainstream people who typically did not go to music festivals. This demographic wore sun hats, cliché store-bought shirts reading “Good Vibes Only,” t-shirts with beer logos and slogans, khaki shorts, and jean shorts, and had typical nicely maintained haircuts. However, on the other hand, the “heads” or festies are wearing festival clothing with fractal images, tie-dye, bucket hats, rave clothing, mismatching clothing, patchwork clothing, pashminas (shawl), and handmade or second-hand clothing. They have dreadlocks, wear their hair in braids or space buns, and walk around without shoes. There was a clear distinction between people who do not regularly attend music festivals and those who do in how they dressed and presented themselves at the reggae event.

Electronic music and raves usher in a different style than reggae and jam bands. Typical rave clothing can include fishnets, crop tops, rainbow colors, solid black outfits, hydration backpacks, fanny packs, sequin-covered outfits, pashminas, booty shorts, thongs, one-piece bodysuits, glitter, EDM artist jerseys, frayed denim shorts, French braided hair, space buns, flat-brim hats, beanies, heavy and elaborate makeup, and vibrant colors like blues, purples, reds, and yellows. Artistic psychedelic patterns, like fractal art and animal patterns, were also prominent clothing designs. This style differs significantly from the earthy tones and flowing clothing fit observed at jamb band events.

Larger festivals with more diverse music also present more diverse fashion expressions. As a result, there is more integration of styles from all the music subcultures, like the EDM and jam band scenes. Some of the clothing features fishnets, booty shorts, crop tops, mesh tops over pasties, glitter in hair and makeup, French braids, bodysuits, bell bottom pants with trippy colors and paisley styles, colorful hair dye, galaxy-themed clothing, celestial patterns, butterfly wings, combat boots, platform shoes, skate shoes, onesies which serve as a costume and keep people warm, elf ears, bucket hats, tie-dye, LED light-up jackets and accessories, faux fur jackets, velvet pants, face jewels, wire-wrapped sunglasses, and wire-wrapped crystal jewelry. Some of the most common accessories are pashminas (colorful scarves featuring oriental or paisley patterns), fanny packs (helpful for quickly accessing essentials, like cell phones, gum, and drugs), hydration packs, hand fans and glow sticks (help people find their friends in the dark and provide visual stimulation while on drugs).

The trends of what people wear can change throughout the festival. During the day, when the weather is warmer, people wear more revealing clothing like crop tops and rave clothes. As the day goes on and the sun sets, people get cold and add layers like leggings, long pants, jackets,

and hats. These trends are not exclusive. When people take MDMA or MDA, it increases their body temperature making them less prone to feeling colder weather. In this case, many women will wear revealing rave clothing, and men may don shorts with no shirts or robes. Fashion also changes throughout a festival. At the beginning of the festival, women may wear more revealing rave outfits, and as the festival progresses, they start wearing more flowing and gypsy or hippy clothing. A potential explanation for this is that many people are taking MDMA and MDA during the first few days of the festival. These compounds generate a sense of euphoria and confidence in sexualized self-expression, leading people to wear more revealing rave clothing. As the festival continues, the serotonin in the brain starts to wane, and people begin to wear more relaxed and comfortable clothing. This pattern can show how people change their style throughout a festival to reflect the drugs they are taking and how they feel. The general psychedelic music scene has a particular fashion taste. Still, there are configurations between the type of music and the clothing style and patterns of change throughout festivals.

What People are Doing

There are many activities and things for people to do at music festivals. They can gaze at mural art or participate in interactive art. They can watch live painters, make giant bubbles, or ride on the Ferris wheel. They can play a life-size game of Guess Who? next to the stage using artists at the festival. They can bet random things, like bracelets, gift cards, a rubber chicken, or suitcases full of clothes, for a chance to win at blackjack. They can stand in the crowd and throw lettuce, glowsticks, tortillas, or beach balls while watching their favorite band. While these are some unique events, two of the most common things to do is dance and do flow arts.

Dancing at festivals is far from any organized form of dancing, like ballroom, swing, or square dancing. Festival dancing is unique and many times indescribable. Much of it is ecstatic dancing meaning there is no purpose or making sense of it. The body moves in whatever way it finds most joyful or pleasurable. Batlernating is another term used to describe this kind of movement. Ecstatic dance is a form of self-expression that depends on how a person feels in their body, the space, and how the music resonates within them. Sometimes it looks energetic, like when people dance to bluegrass. They jump around, hopping from one foot to the other, linking arms with others spinning partners in circles, acting out the lyrics in a song, and waving their arms about in the air. It can also be energetic in a different way. For example, when people feel connected to the sound emanating from beating drums and perform fire dances. People dance around the fire for hours to the everchanging sea of rhythms. Some circle the fire quickly, dancing around while stomping their feet on the ground and waving their arms. Some settle on their hands and knees, staring into the fire, or pound their fists on the ground in rhythm to the drums while making animal noises. Others move more slowly, in a gentle-flowing fashion, with swirling hand movements in the air while gently swaying their hips back and forth.

Many people become deeply engrossed while dancing, portraying the feeling of achieving a sense of personal joy and happiness at the intersection of movement and music. Some people majestically move through space but look so attuned to the moment that they are unaware of their current presence in the reality of time and space. They move around people without running into them but appear as if they are not functioning in this world like they are elsewhere. However, simultaneously, they manage to have complete spatial awareness. One woman at a Tom Petty cover band show danced with her eyes closed. She moved her body to the music, expressing her deep connection to the melodies and lyrics. She placed her hands in the air

as if praising something otherworldly and danced around singing the words to the song, swaying left and right but never interrupting anyone else's space on the dancefloor.

Dancing styles fluctuate with music styles. People at Grateful Dead cover band shows sometimes have a distinctive kind of twirling or spinning, resembling whirling dervishes. Some EDM comes with a specialized dance move. It is a characteristic footwork dance, almost like techno moonwalking, where people jump from one foot to the other in a moonwalking fashion to the beat of house or techno music. Fist pumping and headbanging are also popular with EDM. Other times dancing is ecstatic and self-expressive no matter what the genre is. For example, one woman bent over, grabbed her ankles, and walked wide-legged like an elephant around the dance floor. Throughout the night, she continued to dance by kneeling on the floor and swinging her legs around her body, doing the worm, crawling on the floor like a seal, and beating her hands to her chest like King Kong in tempo with the bass. At one point, she suddenly stopped and threw her arms around her shoulders and upper body in a big hug to herself, and with her eyes closed, smiling from ear to ear, she just stood in the middle of the dance floor looking peaceful, content, and full of self-love. Despite the context of dancing, whether it is fire dancing or techno moonwalking, it has the potential to promote a trance-like state, a form of joy and happiness for people. People experience these feelings within a crowd while simultaneously embarking on an inward personal journey through the connection of music and sound to movement and the body.

People also connect to their bodies through flow arts. Flow arts are an art form combining dancing and body movement with various props. Sometimes people describe flow arts as spinning or juggling, but it is more encompassing than that. Standard flow art props are hula hoops, poi (a set of teardrop-shaped balls attached to the end of a cord), staffs (long batons twirled around the body), juggling clubs and balls, levitation wands (a short baton attached at

both ends to a small invisible-like string that appears to float in the air when people dance with it), flower sticks (a set of three batons: artists twirl one using the other two), turboflux (a 4D mesmerizing arm slinky), buugeng or flowgeng (a set of s-shaped hand props), pixelwhips (a light-up whip people wrap and dance around their body), fire whips, silk fans (hand fans with long flowing fabric), mojura fans (non-folding hand fans), and maces (often steel mace). All of these props are available as light-up props and fire props. Some light-up props, like hula hoops, are programable to display patterns, shapes, logos, and animated designs, creating unique visual effects for sober and influenced observers. Light-up gloves are a commonly enjoyed flow prop. People wear them and perform glove light shows, generating mesmerizing and stimulating visuals for viewers. A less common prop is a light-up web-like hula hoop. It is a hula hoop with a bar across the diameter used to spin it. When rotating it, a web-like netting radiates from the outer rim of the hoop and lights up. I only saw this prop at two festivals during the study. People would lay on the ground facing the sky, and someone would spin the web overtop of their head, which would light up, creating hypnotic light trails.

Acrobatics is another form of flow art. At one festival, a large hoop sat on a tall pole. Acrobats reached up and grabbed the hoop, pulling themselves up into it, then sat inside, rounding their back against the curve as if sitting in the moon's crescent. Sometimes they lay down with their back resting on the inside of the bottom of the hoop while wrapping one leg around the ring and leaning their upper body backward on the opposite side, almost folding themselves back in half. Others stood upright in the hoop and spun it around on the pole. Sometimes someone slowly turned the pole while they changed between various poses.

Flow arts initiate social interactions between artists. People share flow art props and allow others to try new ones. Additionally, people gather and learn and teach new tricks and

moves with different flow props. For example, I was hula hooping at a festival, and a male approached me, offering me his LED hula hoop since mine did not light up. He taught me a new move and encouraged me to keep practicing and learning from others. Flow art can be a social action by connecting with other people. While flow arts are social, there is an independent attribute to them. Psychologist Mihaly Csikszentmihalyi defines flow as “a state in which people are so involved in an activity that nothing else seems to matter; the experience is so enjoyable that people will continue to do it even at great cost, for the sheer sake of doing it” (1990:4). As the name suggests, flow arts are one way to achieve a flow state. At the same time, flow arts align with the practice of dancing. It is an activity that is somewhat of an inward independent journey yet simultaneously social.

Festivalgoers experience flow through dance and flow arts. At the same time, a different flow generates from the general flow of events at festivals. An established timeline of events organizes the days. In the mornings, women prepare for the day by applying makeup, glitter, face and body jewels, and getting dressed. Many women put on intricate makeup schemes corresponding to their outfits or costumes for the day. For example, applying full face paint mimicking a Dia de Los Muertos skull. Others prepare for the day by taking showers and cooking eggs and bacon for breakfast. The early morning and mid-afternoon are when people venture around campsites selling stuff (also known as hustling). Some sell their hand-crafted art, like jewelry, wire wraps, glass pipes, and art. Others sell recreational drugs. By the mid-to-late afternoon, people start venturing out to the main festival grounds for the music, food, and vendors. Music usually begins in the early or mid-afternoon and goes on until late at night or into the early morning hours.

At the stages, there are patterns of how people move in and out of the crowd throughout a set. About a quarter of the way through a set, people join the crowd, and it becomes very crowded. Then about three-quarters of the way through the set, people start to leave to find a spot for the next set, and the crowd thins out. When it was cold at festivals, I could feel when the crowd was dissipating because I could feel the cold air move in as fewer bodies filled up the space. I could also tell when people were filling in because I felt the areas around me become warmer.

After the main festival music ends, the party does not stop. People sit around fires, socialize with friends, wander the festival grounds looking at art, do other drugs (often nitrous and ketamine), and search for renegade sets. Renegade sets are in the campground areas, where people DJ or bands play unscheduled music. These sets can be people who played earlier at the festival or those who are just interested in music. One festival artist, Future Joy, held multiple renegade sets in a festival weekend. They set up their equipment and speakers on a fold-out balcony from their RV. People scattered the campsite, dancing and socializing while they played music. Security eventually requested that they shut down the set for the night. In my experience, security is polite about giving a gentle warning to shut off the music before they come back with law enforcement. Whether at renegades, around campfires, or in other areas of the festival grounds, late night is a time for people to gather with friends, make new ones, dance, do recreational drugs, and cuddle up on air mattresses with blankets.

Silent discos are sometimes another late-night activity for people who want to keep the music and dance going. This activity allows artists to keep playing music without breaking sound ordinances or keeping people from sleeping. Silent discos take place on a stage with at least one DJ or band (sometimes more) playing music. Everyone grabs a headset and picks a channel to

listen to (if there is more than one artist). Each channel features a different artist or band playing music, and people can change the channel as much as they want. Sometimes people dance to the same artist as their friends, and other times they are not. Viewing silent discos from the outside is incredibly entertaining because people are dancing around, but there is no audible music. The DJ sometimes tells people to scream, but all anyone on the outside hears is a crowd of people saying “yea.” One silent disco only had a three-person band on the stage; a drummer, a keyboard, and a guitar player. At one point, I took my headphones off to hear the band. The drummer banged on rubber pads, so a dull thumping sound came from him. Then there was the singer, who was barely audible without the headphones because the microphone was not amplifying his voice. The keyboard player was pounding on the keyboard, but no sounds emanated from the keyboard. Essentially, it was just a bunch of pounding noise. Looking around, everyone is dancing, shaking their heads, and digging into the music. However, on the outside, there is no music to hear or connect to how people move. Silent discos are a unique experiment in understanding the contextual relationship between dance and music. As an outside observer, unable to hear the music at the silent disco, watching people dance and hearing them shout makes little sense because it is out of context. Placing the headphones back on allowed me to reconfigure the context of dancing within the perspective of others experiencing the music through headphones. It solidifies the intricate relationship between music and dance that is misrepresentative outside its context. While this example originates from my experience at a silent disco, it is a metaphor for the importance of understanding the contextual relationships present in any activity or experience, at a festival, and within recreational drug use. Much like watching people dance without hearing the music, it is impossible to understand recreational drug use experiences when missing contextual elements.

Drugs

Commonly used drugs at music festivals include LSD (liquid, gels, and tabs), MDMA, MDA, cocaine, alcohol, cannabis (smoked, edibles), ketamine, mushrooms, nitrous oxide, and Adderall. Some people openly use drugs at festivals, making it easy to observe drug use. Other times, drug use is less obvious and more implied based on physiological and behavioral effects. Identifiable drug use included seeing people smoking cannabis in their cars or large social circles, people drinking alcohol, and people doing nitrous oxide out of balloons. Less identified drug use often involved powdered drugs. For example, someone used a vape pen to crush and break up a white powder in a small baggie on their phone. Someone else snorted powder off a dimple on their hand. Unfortunately, many drugs are powders, like ketamine and cocaine, making it impossible to know what drugs these powders were.

A more easily identifiable drug is MDMA or MDA because of how people behave while on it. First, MDMA and MDA create muscle tension, especially in the jaw, so many people furiously chew gum, the end of glowsticks, or light-up pacifiers, which can be a sign of ecstasy use. Another sign may be when people show the physiological effects of ecstasy through eye movements. One form of eye movement is fluttering or nystagmus, where the eyes involuntarily jiggle back and forth, which creates visual distortions, like light trails. Many consider this effect a pleasurable part of the experience. For example, one couple at a set showed signs of MDMA or MDA use. The woman was tall and thin, wearing a silver glitter unitard (in 40-degree weather) with French Braids in her platinum blond hair. The guy standing behind her with his arms wrapped around her waist dressed as a Viking. At times the woman's eyes would flutter, and other times they started to roll back into her head, a common effect of higher doses of ecstasy. Another woman displayed similar effects. Around 6:30 pm (much earlier than many people

commonly take MDMA or MDA at a festival), a woman walked around a festival wearing something in her mouth, almost like a ball gag but a rounded block instead of a ball. She clenched her jaw against the block as her eyes fluttered and rolled into the back of her head. Another physiological effect of ecstasy is the decreased ability to regulate body temperature, often resulting in sweating. For example, one woman, standing in front of her male partner, swaying together to the music, was wearing a sports bra and leggings. Her torso was glistening from sweat despite it being about 50 degrees outside. As people come down from ecstasy, they show signs of being relaxed with less jaw tension and dancing with less energy. They go from headbanging and jumping up and down to swaying to the music or sitting and cuddling with friends and partners on air couches. Often, the large grins that don their faces early in the night fade away as the night progresses and the effects of the drug wear off.

In some instances, people were more overt about their substance use as they talked openly with it about their friends loud enough for others to hear. For example, one group of friends was at a set, one girl and three guys in their early 30s, when the girl said to one of the guys, “he just came back from the Nethers.” She explained that her friend was just in a k-hole (the intense feeling of disassociation created by high doses of ketamine). The friend further explained he was tomato bisque. Before, he was another soup, but at that moment, he was tomato bisque. Later in the set, the ketamine guy snorted more of a white powder (potentially ketamine or cocaine) and started working with his friends to leave the set. Another group member mentioned how the ketamine guy started drinking beer at 9:30 am that morning, did 100 whippits (whipped cream nitrous oxide canisters), and took ketamine.

People choose to take different drugs and engage in other drug use practices depending on the type of music, the duration of the event, and their social circles. The genre of the festival

influences the kinds of drugs people take. At a music and arts festival with more spiritually conscious music, only a few people drank any alcohol for the duration of the festival. Those who did drink only did so at their campsites and not in the common areas of the festival. No one openly used chemical or powdered drugs like MDMA, MDA, or ketamine at this festival. This behavior may be because of the negative connotation ascribed to these substances within the conscious subculture of people who use psychedelics. Some facets of the culture view powdered substances and alcohol as party drugs and often do not associate them with spiritual use or consciousness expansion. Those who choose to use powdered substances and alcohol may take them privately in this setting, in different settings, or avoid events with more conscious music. Instead, LSD and mushrooms were the two most common drugs at this event. Compared to powdered drugs, this sector of the community views these substances as more natural, coming from their Earth or connected to spiritual practices and use. Also, it is more difficult to identify if someone is on one of these psychedelics compared to others, such as MDMA or MDA. The outward physiological effects and behavioral changes are less detectable for LSD and psilocybin than for MDMA, MDA, or ketamine. Still, there was no open consumption of LSD or psilocybin. People talked about taking them, but consumption took place in private spaces like their campsites. This more elusive practice of drug consumption may be because of the nature of the event. It focused on consciousness expansion and included many activities to engage in it, like fire dancing, cacao ceremonies, and sound healing. Compared to other events, some participants feel they do not need to engage in psychedelic use to achieve an altered state of consciousness. Those who take psychedelics tend to take them privately, perhaps for respect to those who do not.

EDM shows and festivals tend to have more MDMA, MDA, and DMT use, but the event duration also determines what people take. For example, for single-day EDM shows, people may opt for taking cocaine over MDMA or MDA to avoid any type of aftereffects, especially if they have to work the following day. Also, people may take their psychedelics before entering the event venue. For example, they may take it in their vehicle or while waiting in line to enter the event. This practice is common to avoid being caught with illegal drugs by security.

Similarly, single-day bluegrass shows displayed more alcohol use than any kind of psychedelic use, despite evidence of the psychedelic culture. This phenomenon is partly due to its legal status and social acceptability compared to other substances. Venues sell alcohol, making it accessible and acceptable for open use. On the other hand, the illegal nature of psychedelics makes them stigmatized at these events. Hence, people use them privately, either in their car before the event or in the bathroom after passing through security. Interestingly, the perspectives between alcohol and psychedelics switched in other festival contexts. For example, at a spiritually conscious music festival, alcohol consumption is less accepted. Thus, people consume it at their campsites, if they do at all. In some instances, others prefer not to take any substances at music events or festivals, no matter the music genre or duration of the event. For example, one male in his early 40s explained that he does not take psychedelics at festivals because the festival is enough to make him feel like he is tripping. Instead, he prefers to take psychedelics at home, where he can control things more.

For multi-day music events, often with camping, people establish regimented schedules for what substances to take and when. On the first day, many people drink alcohol, evidenced by people walking around with beer cans in their hands, in backpacks and coolers. Later in the evening, more people use ketamine, snorting it off a miniature spoon. Alcohol is still the top

drug of choice for day one. One festival worker wrestled with removing the trash bag from a disposal can because it was overstuffed with beer cans and bottles. A few people helped the worker free the bag from its constricting container by laying the can on its side and squeezing it out as the worker grappled with the trash can. Sometimes people take MDMA or MDA on the first day, especially at EDM festivals. Other times people wait until the second or third day. At the same time, some people take MDMA or MDA every day.

Decisions on consuming LSD and psilocybin often revolve around seeing specific artists while on those drugs. Some people prefer to take LSD or psilocybin during the day with more relaxed jam band sets, then take ecstasy at night for EDM sets. Mixed-music festivals usually end with Bluegrass Sunday, another heavy drinking day for people. Partly because some people leave the festival on the last day and do not want to drive on drugs except alcohol, while others choose to go the next day and do not want to experience any aftereffects of drugs. Some drugs are used frequently throughout the entire festival, like nitrous oxide, ketamine, and cannabis. Many people do nitrous in the morning while getting ready for the day. Potentially because it is a short-lived experience (30 seconds to a few minutes for one hit), people are not committed to an altered state for an extended time. Others smoke cannabis while coming up or waiting for the effects of other drugs to onset as it can provide a sense of relaxation and take the edge off the come-up. Additionally, other people use nitrous oxide, cannabis, and ketamine late at night when coming down from other drugs. Sometimes people drift away from their original drug use plan because of what their friends consume or become cued to use drugs they did not intend to. For example, one male explained how he does not want to do cocaine, but when he drinks, he often does. The alcohol lowers his inhibitions resulting in him doing cocaine, and then the cocaine makes him want to continue using it. In another instance, someone planned on taking LSD, but

after a rainstorm, other friends in their group considered taking MDMA, knowing it would keep them warm after the chill from the rain settled into the night. This person decided to wait to take LSD with his friends the next night and take MDMA with them instead.

Social groups also influence drug use practices at festivals. For example, one group discussed their planned daily regimen of drugs at the beginning of the festival. Each morning they recapped what drugs they planned to take. At the beginning of the festival, someone mentioned they had Adderall but were thinking of saving it until the last day when they were tired and needed the extra energy. By the festival's final day, this person decided to take MDMA instead. They considered taking LSD but justified not taking it, knowing it would not create an effect since they had taken it for two days. Like Adderall, they knew the MDMA would give them energy after being worn out and tired. They also believed the MDMA enhanced the effects of the LSD from the day before. Discussing drug use schedules is helpful because people in a friend group on the same drug sometimes congregate together based on the substances they take. For example, friends in a group using cocaine together may hang out more closely together than they would with their friends taking LSD. This social behavior could be because people on similar substances can relate to the effects of being on the same drugs and confirm their experiences, reassuring the drug they are experiencing is working as anticipated.

There seems to be a general trend that larger multi-day music festivals have more open drug use than smaller multi-day or single-day events. At larger festivals, people are in bigger crowds, which hides their unrestricted drug use from security. For example, some people sit toward the back of the crowd or stand in the middle of a large crowd to snort powdered drugs. At the same time, some people feel uncomfortable taking drugs or experiencing the oncoming effects of them in a large crowd. Instead, some people take their psychedelics at their campsite

with a small group of friends. Once they feel settled and more comfortable in their altered state, they enter the main venue to enjoy the music. For example, some participants mention feeling nausea or vomiting after taking MDMA or MDA. Because of this, they choose to take it at their campsite and near a bathroom where they feel confident in managing the oncoming effects of it. Music festivals host a range of preferred drugs and drug use practices. In some cases, people commonly plan out their drug use. At the same time, drug use practices fluctuate depending on the music genre, size and duration of the event, social influences, and drug effects.

Chemosociality

The previous sections of this chapter portray the music festival environment, the space where things happen. This section introduces more of the human factors in that image and some of the social interactions that take place. Various forms of socializing occur at music festivals. When these forms merge with sociocultural practices, like gift giving, they generate a “vibe” within the community defined by feelings of freedom and acceptance. This sense of community develops from the human interactions with psychedelics in the context of music festivals and functions as a form of chemosocialities.

Socialization within Friend Groups

Socialization within friend groups at music festivals is often a practice of showing love and support. For example, when friends greet, they hug, kiss each other on the cheek, and say how happy they are to see them again. In addition, friends show endearment by sitting and talking with each other while waiting for a set to begin, waiting as a group for someone to use the restroom, sitting and eating food vendor food together, and singing song lyrics to each other

during their favorite set. Socialization practices can break ascribed mainstream gender rules. For example, a group of guys talked about separating to see different sets. Before departing in different directions, they told each other they loved each other and hugged before walking away. This practice of expressing appreciation for each other in public is a common form of socialization among males at festivals, but mainstream culture stigmatizes it.

Friend groups support each other in additional ways. For example, a group of three friends talked, one female and two males, during a show. One male said he was grateful the female started dancing to the music because it helped him and the other male move through some uncomfortable physical feelings while being on LSD and helped them have a great time. The female encouraged her friends to dance, which supported them through a challenging phase of their psychedelic experience. At an indoor show, a female in her early 20s sat at the bottom of a short set of stairs next to a small stage. She laid her head on her folded arms on top of her knees, and it looked like she did not feel well. Her friends stopped dancing to check on her and helped her walk outside the venue. These examples show how friends work to show their love and support for others in their social circles.

Socialization between Strangers

Strangers are also loving and supportive of each other at music festivals. While walking around the vendor area of a show, I talked with a woman about some stickers we found at a vendor's stand. She pulled a Jerry Garcia sticker from a basket and said, "there are so many things to see in this." Together we pointed out different things like animals and Chinese characters. She pulled another sticker from the basket, and we identified other unique items in the image. This interaction created a memorable bond from a fleeting interaction with a stranger.

While I passed out research flyers at another festival, a woman at a campsite talked to me about affirmation readings. She offered me one as a token of appreciation for my work. Other people walk around festivals spreading love and positivity by telling strangers they are beautiful or sharing sentiments like “happy [name of the festival].” One person walked around campsites with a canvas and paints, asking people to paint their finger and add it to a canvas to create community art. This form of socialization acted as a way to engage strangers while symbolically uniting people at a festival through community-generated art.

Different things can initiate interactions between strangers. For example, I was holding one of many Kevins at a festival (a culturally named green alien balloon common at festivals). Many people recognized Kevin, and some approached me, saying, “you found Kevin,” and hugged the balloon. This recognizable cultural object initiates social interactions between strangers at many festivals. Another festival featured a male set up at a small desk with a typewriter. He wrote short poems about any chosen topic. While people waited for him to write a poem, he had them play a game with others to pass the time. Sometimes he called on passersby to join the game creating social interactions between strangers.

Strangers also provide support to others when friends are not around to help. For example, I was searching for the harm reduction tent at a festival to share some of my research flyers. I ended up lost in the winding roads of the campground and decided to ask two people walking by for directions. Not only did they help me find my way, but they also walked with me until I reached my destination. During the same festival, someone from a neighboring camp hung a red light from a pole at their site. They informed our camp about the light to help us find our way to our campsite, stating it is easy to get lost in the dark woods while tripping at night. Late night at another festival, someone fell asleep in the grass towards the back of the crowd. A

stranger walking by placed glow sticks on the ground surrounding them so others would see them and not step on them. At another festival, a young male in his early 20s approached two strangers, a male and a female in their early 30s. He asked them if they had any water. The female offered her water and told him to drink as much as he needed. He finished the entire bottle. The male then offered his water, which he also drank. He was grateful for their willingness to share in his moment of need. These examples display brief social interactions where strangers assist and support others in various ways at music festivals.

Security

Security plays a pivotal role in setting the tone for event attendees. Positive interactions with security create a comfortable and safe space for people to engage in dance, music, and substance use, while unsupportive interactions can have the opposite effect. For instance, a woman on ketamine needed space away from the music during an event. She took a seat in the back of the venue. A security guard repeatedly checked on her to ensure she was okay and asked if she needed anything. The security guard also offered a space for her to lie down if necessary. This example is a supportive interaction with security. They can also be good proponents of harm reduction. As festivalgoers walked through security at one festival, a security guard reminded them to “stay hydrated and have fun.” Someone walked up to a security entrance at another festival with an open drink. Instead of the security guard making him throw it away, they let him enter the festival with it. This interaction may not seem monumental, but when security directs people to throw out their open drink containers (caffeine, alcohol, LSD in a drink), they are more likely to chug the drink quickly. This practice is poor harm reduction and can lead to someone drinking too much, too fast, instead of pacing themselves based on their body’s limits.

By the security guard allowing the person to enter the venue with an open container, they reduced the risk of rapid consumption and overconsumption.

Security and cops also develop positive relationships with people when they understand their positionality as people in power and convey that they are not a community threat. For example, when two cops appeared at a small residential venue, no one appeared nervous about their presence. Instead, the cops briefly announced to the crowd that they received a call from someone's daughter asking them to perform a wellness check on her mother. The daughter believed her mother was at the venue, leading the police to look for her. One of the venue managers repeated the officers saying no one was in trouble, they had a strong relationship with the police, and they were not there to bother or arrest anyone. They were simply there to check on the safety of the woman. This example is unique in how police can prioritize the health and safety of community members over illegal substance use, which creates a safe and comfortable space in their presence.

Not all interactions with security or police establish a supportive community environment. For example, one frequented venue hosts security guards notorious for searching people extraneously hard. Overall, they are most concerned about weapons, but with extensive searches, they find people with drugs and refuse entry to the venue. In one instance, they searched a male by placing their fingers inside his waistband, tracing the outline of his torso. As a result, they recovered a few cannabis joints. In another instance, a security guard searched the secret pocket of someone and found a bag of white powder. They allowed them to return the bag of powder to their car before allowing them inside the venue. Additionally, this venue did not allow anyone to bring in empty reusable water bottles and did not offer a free water option, even during the hottest summer months.

When entering a large multi-day camping music festival, police and festival volunteers searched everyone's cars, sometimes utilizing k-9 dogs. Before approaching the search area, police provided a small (shoe-sized) black amnesty box where people could forfeit their illegal substances before being searched. Police officers searched cars thoroughly, pulling out coolers, opening suitcases, and unpacking vehicles. Volunteers were less intrusive than police in their searches. Subjecting festivalgoers to invasive searches before entering a festival creates high stress levels. Some reduce the risk of being caught and arrested for possession of drugs by not bringing them. This practice requires them to purchase substances at the festival, subjecting them to taking drugs from unknown and potentially untrusted sources. This festival also did not provide reagent testing services, ultimately increasing the potential for risk and harm related to recreational drug use. The relationships security and police form with community members and how they interact with them contribute to creating empathetic or distrustful environments for using drugs at festivals.

The Culture of Gift Giving

Gift giving is a core element of social interaction in music festival culture. People unconditionally give tokens to friends and strangers with no expectations in return. In mainstream culture, there are different forms of gift giving, described as reciprocity. Balanced reciprocity typically occurs between strangers, acquaintances, or some friends with the expectation of an equal exchange of goods or services within a specified timeframe. Generalized reciprocity often occurs between family and friends and does not come with the expectation of a returned favor. Negative reciprocity occurs when someone attempts to get more from the exchange. Giving gifts without any expectation of return blurs the boundaries between

generalized and negative reciprocity, where someone willingly gives more to another person with no expectation or desire for anything in return. Unlike negative reciprocity, gift giving has no negative connotation within the music festival community. People shared some of the tokens they received as gifts from strangers at music festivals, including stickers, glass mushrooms, a dog tag necklace with the name of the festival engraved in it, crystals, pre-rolled joints, “festi-cards” (cards that look like Pokémon cards but feature musicians and DJs with their skills and powers), finger puppets, polaroid pictures, crafted necklaces, pashminas, drugs, clothes pins painted and decorated with positive sayings like “love and light” or “+ > -,” alien head key chains, and pocket hugs. The pocket hug was a small heart attached to a card that read, “Here’s a little hug for you to make you smile when you feel blue. To make you happy when you feel sad, the littlest hug you’ve ever had. But when it’s time to hug once more, there are lots more hugs for you in store.”

Other exchanges come with a form of equal exchange. For example, someone at a festival was handing out doses of LSD to people who did cartwheels. Also, a group of campsites at a festival exchanged nitrous balloons, firewood, and cannabis dabs for LSD and CBD. The exchange created a weekend-long friendship. “Take one, leave one” tables are also a form of gift giving reciprocity. Some people set up tables, blankets, or boxes of different items and encourage people to “take what they need and leave what they don’t.” At one festival, one such table had shower curtains, snacks, erasers, a bottle of water, clothes, bracelets, small toys, Pokémon cards, and glowsticks. During another festival, I constructed my own exchange table to see what people needed and what they left. My table started with toiletries (razors, hotel-sized shampoo, conditioner, and soaps), napkin and plastic utensil packs, deodorant, travel coffee mugs, lotions, vitamins (niacin and biotin), sunscreen, hand sanitizer, a shirt, fake flowers,

condoms, small first aid packs, hair care products, new toothbrushes, hand fans, sunglasses, hair spray, makeup remover, bug spray, metal bracelets, a high times activity book, foot powder, and a card game. At the end of the festival, most of the original items were gone. Some people left things in exchange, including an unknown bag of white powder. Gift giving is a powerful countercultural practice against mainstream economics, distorting the boundaries of reciprocal expectations.

Crafting the Music Festival Vibe

The social interactions with friends, strangers, and security, along with practices of gift giving, create a beautiful and unique vibe that lures people to these events. It generates a sense and way of being in the world juxtaposed to our mundane realities of school, work, and family. Describing the “vibe” is about as easy as describing an ineffable psychedelic experience. It is easier to show it than describe it.

One display of vibe is through the surplus of positive messages people, artists, and musicians share. The section on how people love and support their friends and strangers provides examples of positive messages within the community. Musicians and DJs also use such messages to build community positivity. For example, Mike Love talked directly to the audience at one festival, speaking about how everyone is together in the moment, bringing love and light into the space. He reflected on the challenging times (during COVID) and how lucky we were to come together as a family to share love and connection. Another artist at the festival, Rising Appalachia, took time during their performance to say, “Be good souls out there. Be patient. Be Gentle. Be kind.” At another festival, a DJ portrayed the same idea: “This is a community. We built this together. We share this together. Go out into the world and spread what we have here.”

These sentiments create a positive vibe. At the same time, it is more than cultivating this vibe in the community. It is about taking that energy, that positivity, that vibe back out into the world and sharing it with others.

Festivals are a place to cultivate a positive vibe while also practicing and embodying it. At one festival, the announcer stood on stage after each set and guided the audience through a gratitude practice for the musicians. First, he instructed everyone to rub their hands together, manifesting love and gratitude. Then the musicians opened their hands to receive it. Someone also handed out stickers for the Beloved Billion Movement, recruiting 1 billion people to commit to loving themselves and loving life beyond condition. It attempts to drive out hatred and negativity in our societies and fill them with love and acceptance.

Another way to conceptualize the vibe is by exploring how feelings of acceptance and freedom of expression create a sense of community. A fundamental phrase in the EDM community is PLUR, which stands for peace, love, unity, and respect. Educating new community members about these standards is a cultural practice, so people enact them and create an accepting space for everyone. PLUR is evident in the social interactions found within the festival community. For example, people express love through positive messages. When someone tells another person how beautiful they are, that social action engages the elements of PLUR. Friends and strangers providing support to others by giving them water when they are thirsty or talking them through a challenging experience is an enactment of PLUR and community building. Acts of gift giving generate the components of PLUR by selflessly giving to others, which establishes connections, respect, and gratitude to other community members. These practices create PLUR in the music festival environment. When the community establishes PLUR, people feel accepted within the festival space. Someone explained how despite always going to festivals without

friends, the PLUR vibe always welcomes him making him feel like he is in his happy place. He describes the community vibe as more than feeling the surrounding people around you but feeling as though they are “with you.” COVID challenged these social connections and the community vibe. As venues opened and music started again, people talked about feeling reconnected again.

Community is an essential component of the vibe and the music festival space. Through an informal conversation with someone, they expressed the notion that “When you enter the gate, it doesn’t fuckin’ matter who you are... We all bleed red.” This sentiment speaks to the diversity of people that compose the community. Some have PhDs, while others have GEDs. Some are employed, and others are unemployed. Some live in buses or vans, while some own multiple homes. Once everyone is together at the festival, the environment strips away these identity characteristics and labels. Music festivals place everyone on a level playing field, making it a safe and comfortable space for people to reinvent themselves outside of ascribed social labels. In the process of shedding identities, people also release the constraints of the everyday world. The responsibilities and attachments to emails, desk jobs, financial responsibilities, and emotional distress drain from the body and mind as people enter a creative other-worldly playground. Women’s dress is evidence of the freedom of expression, challenging mainstream gender norms, modesty, and ideals of contained feminine beings. It is also in groups of men wearing rainbow-colored shorts while kissing and holding hands, dressed in glitter and drag. Everyone is free to be and express whomever they want to be without the everyday oppression of western society. The vibe does not just create a sense of positivity. It constructs an alternative world, an exploratory reality to find one’s true being while being welcomed and accepted with open arms, free from judgment and persecution. The vibe of music festivals extends beyond the drugs that people take.

It encompasses the context of their use, the socialization and establishment of community, and the freedom to be and act as anyone chooses, breaking free from mundane reality in a comfortable and safe environment. Much like psychedelics, part of the challenge in comprehending the vibe is that it is ineffable and limited by the nature of language. The vibe is a complex experiential energy, otherwise incomprehensible outside of lived experience.

A Reflection on Ascending from the Rabbit Hole

My thick description is an alluring presentation of love, positivity, and acceptance at music festivals. While this vignette is not false, I feel it is necessary to reflect on one of the painful shortcomings of these otherworldly crafted spaces. Leaving these spaces means re-emerging from the rabbit hole, crossing back through the portal, and reentering reality. For many, this transition back to everyday life is challenging and unsettling. Someone summarizes these feelings in a social media post, “In this last weekend, I have laughed with all the happiness and cried with all the sadness I’ve held back for the last two years. I was spiritually exhausted by the time I got back to Ohio. Music fests...I’ve learned are hallucinogenic. Eventually, you have to come back down to earth, but hopefully, little pockets of light are left in the corners of your mind to pick up on a rainy day. I’ve had dreams every night since I left that I’m walking the sandy paths.”

It is somewhat impossible to observe these feelings in others, so I have few observational notes from others highlighting this struggle of reentering society. Therefore, to speak to this feeling and some fundamental understanding of it, I present a culmination of personal reflections directly from my field notes on leaving these spaces:

I didn't want to return to the noise and business of the city of Tampa. I wanted to stay amongst the whispers and comfort of the trees. There is something healing about them. Something calm and comforting about them. I didn't want to leave our neighbors who so quickly and easily became friends knowing we may never cross paths again. Yet, I knew their short-lived presence in my life would leave a mark of beauty and gratitude. As soon as the sound of the tires hitting the pavement met my ears, I felt like I had lost some of the beauty and magic – a sense of dread with having to return back to reality - a capitalist society that makes believe that material things matter when in the world of festivals they don't. I hate looking at my phone and seeing the news knowing the world continued on without me, wishing I could forget it and escape to the woods forever. But, alas, there are things we must return to even if we do not want to. Returning to reality after a festival has a sense of culture shock to it – having to adjust to new cultural rules after living in a different framework, even if just for a few days. It can feel overwhelming returning to everyday life with expectations and work, and deadlines, and sometimes it feels like I don't know how to reintegrate back into society again. I figure it out at some point, but it usually takes a few days. I know I try to hold onto that feeling of freedom, fresh air, beauty, love, and gratitude for as long as I can before the mundane demands of everyday life swallow me whole again.

Summary

This chapter takes readers on a journey down the rabbit hole and through the multitude of worlds that compose music festivals. Through thick description, it depicts the colorful and creative physical, musical, and social worlds that collide to create whimsical playgrounds. The

music festival grounds are a collaborative functional art piece quilted together in unique patterns and shapes to serve many purposes. People creatively decorate campsites to establish comfortable spaces serving as temporary homes-away-from-home during the event. Stage production blends visual elements of lights, lasers, projection mapping, and visualizers along with musical performances to create stimulating and immersive experiences for the audience. Different forms of art merge with the environment and physical space to create artistic entertainment centers and various levels of engagement through murals, installations, and interactive pieces. Vendors add an additional element to the scene by selling unique goods as cultural artifacts to the community. Workshops provide alternative and supplemental activities for people to explore and experience the festival environment. Festivals also offered different layers of harm reduction to manage risk in recreational substance use.

These crafted festival worlds resonate with Kyriakopoulos' (2021) examination of psytrance festivals. The otherworldly features of festivals from my study speak to what Kyriakopoulos' (2021) calls "dreamworlds" and function as spaces that allow people to leave their everyday world to enter into a psychedelic playground. This playground is apparent in the descriptions of the stages and artistic spaces created within the main festival areas. My observations also find that the construction of the festival drives what people do, including what activities they participate in, what drugs they take, and when they take them. Kyriakopoulos' (2021) conceptualizes this idea around a "timestamp" of the festival. My observations support this in the routines of taking certain drugs, like nitrous, cannabis, or ketamine in the morning and late at night and other drugs, like LSD, psilocybin, and MDMA/MDA in the evening. While these spaces develop routines for people, Kyriakopoulos' (2021) examination falls short in my observations. First, Kyriakopoulos (2021) heavily relies on the music and the artistic spaces

created within the festival as drivers of routine. While the lineup, type of music, schedule, and art influences drug use practices and daily activities, my observations find there are other elements in conjunction with music and art. Outside the main music festivals, the campgrounds are essential spaces where people start and end their daily festival routines. They are also spaces where critical social activities occur, especially in the early morning and late at night. The workshops and vendors are spaces within the festival that fit into daily routines. Workshops are typically in the morning before the main music starts or during early sets. People visit vendors in the afternoon before preparing for the main music acts later at night. While Kyriakopoulos' (2021) observations of how soundscapes shape peoples' activities, other critical components of space contribute to these routines.

The environmental elements of music festivals are not enough to understand the full context of the music festival experience. A second missing piece from Kyriakopoulos' (2021) work is the role of the community in festival experiences. Adding the unique cultural community is another layer of the painting. This community dynamic identifies chemosocialities created from the relationships between humans and psychedelics. When adding the human element, it is clear there is a particular fashion sense with various configurations between the type of music, style of clothing, and drug use practices throughout the culture. Some music contexts drive different relationships with drugs, like the presence or absence of alcohol and chemical drug use (MDMA/MDA or ketamine). Sometimes this aligns with cultural representations of these drug experiences through clothing, such as wearing psychedelic patterns where LSD and psilocybin are more common.

Other chemosocialities are evident in dance and flow arts. These activities serve as a practice for people to turn inward and connect to their bodies while sometimes simultaneously

socializing with others. These socialities within individuals and between other festivalgoers come from the physiological effect of psychedelics and the liminal and social environment of the festival. Other activities people participate in dictate a festival's overall timeline of events and determine various drug use patterns that result in chemosocialities. People spend the morning preparing for the day, the afternoon watching music at the festival stages, and the nights dancing at renegades and socializing with friends. These patterns entangle with drug use practices regarding which drugs people take during different times and days of the festival. These patterns of drug use are flexible and subject to change. Understanding the contextual relationships of festival elements in the experiential nature of drug use is essential, as discovered within the metaphor of silent discos.

Various community dynamics support chemosocialities. In social groups between friends and strangers, there is the practice of spreading love and support, which positively enhances the social environment. People support these actions through practices of gift giving, which blur boundaries between mainstream ideas of reciprocal changes. Social relationships also come from interactions between festivalgoers, security, and psychedelics. Security and police can create supportive or harmful environments for people using drugs at festivals, so their presence is critical to the social context. These micro-level socialities contribute to a larger community vibe that brings together the social and human elements between friends, strangers, security, and the practice of gift giving. This essence of music festivals is indescribable and a hallmark of the festival environment and community, conceptually defined by peace, love, unity, and respect. The vibe is a grander community that emerges from these chemosocial relationships of people taking psychedelics at music festivals. All of the individual pieces presented throughout this chapter come together into an intricately crafted extraterrestrial existence that provides people a

safe space generating chemosocialities defined by freedom of expression and acceptance separate from everyday life. Leaving these carefully constructed worlds can be challenging, making people contemplate the constructs of mundane reality and establish a desire to journey down the rabbit hole once again.

CHAPTER 6:

SALIENT ENTANGLEMENTS OF EGO DISSOLUTION, ONENESS, AND MUSIC

Introduction

This chapter presents the analysis of the quantitative data from the survey. The 53-question survey contained four sections asking participants to reflect on their most transformative psychedelic experience at a music festival while on LSD, psilocybin, MDMA/MDA, or ketamine (Appendix II). The first section included demographic questions. The remaining sections consisted of three tiers of questions relating to the most transformative psychedelic experience. The first tier presented multiple-choice and short-response questions on the context of the psychedelic experience. The second tier of questions included two questionnaires to evaluate the sensory and experiential aspects of the psychedelic experience: the 30-question Mystical Experience Questionnaire (MEQ) (Griffiths et al. 2006) and the Psychological Insight Questionnaire (PIQ) (Davis et al. 2021). Finally, the third tier contained open-ended questions asking participants to reflect on and describe the context of their psychedelic experience. Data analysis included all eligible survey responses (n=485).

First, I analyze the demographic data, event characteristics, and drug practices using descriptive statistics, histograms, bar charts, and box plots. Second, I use these methods for exploring the MEQ and PIQ data. I divide survey participants into two groups, those with mystical experiences and those without, and compare the demographic characteristics between these groups. The analysis finds differences between the mystical groups regarding their PIQ

scores. Third, I use Smith's *S* Salience Index to analyze potential factors contributing to participants' transformative experiences. Then I compare these factors between the two mystical experience groups. This analysis highlights the entanglement of Zinberg's examination of how the physiological effects of drugs come together with the set and setting to create unique drug experiences. It also suggests that ego dissolution experiences are mechanisms for transformation and meaning in participant experiences. Finally, I compare differences in the PIQ subscale scores between the mystical and non-mystical experience groups using independent Student t-tests and logistic regression. Considering this method collected data using convenience sampling, this analysis's results only represent the study participants and do not represent the general population.

Demographics

The survey demographics include age, gender, ethnicity, marital status, education, employment status, annual household income, religion or spirituality, level of religiosity or spirituality, and political orientation. Table 6.1 summarizes the demographic data. These data represents all 485 eligible participants who started the survey. This inclusion captures the demographics of all participants who reported having a transformative psychedelic experience, compared to only those that completed the MEQ (n=312). Survey participants' ages range from 18 to 65, with a mean age of 31.6 years and a median of 29.0 years. Most participants are between the ages of 20 to 35 years. Fifty-four percent of survey participants are female compared to 43.9 percent male and 2.2 percent non-binary. The ethnicity of participants is predominantly Caucasian (81.0 %), followed by mixed (9.1 %), Latinx or Hispanic (3.5 %), other (2.2 %), Asian (1.8 %), African American/Black (1.3 %), Native American (0.4 %), Native Hawaiian or

Pacific Islander (0.4 %), and unknown (0.2 %). “Other” responses to ethnicity include Ashkenazi, Earthling, Jewish, and Indo-European. Most participants are single, never been married (63.0 %), followed by separated (40.0 %), married or in a domestic partnership (28.4 %), divorced (6.9 %), and widowed (1.3 %). The highest level of education completed was a bachelor’s degree (32.4 %), followed by some college or university (no degree) (25.8 %), Associates degree (12.0 %), Master’s degree (11.4 %), high school diploma or GED (9.8 %), trade school (4.2 %), Ph.D. or a professional degree (2.6 %), and some high school with no diploma or GED (1.8 %). Most participants have full-time jobs working 40 hours or more a week (60.0 %), or have multiple employment statuses (11.4 %). Other employment statuses include self-employed (9.8 %), part-time employment (8.5 %), full-time student (4.8 %), unemployed (3.3 %), unable to work (1.1 %), retired (0.9 %), and part-time student (0.2 %). The most common household annual income ranges from \$20,000-\$50,000 (40.2 %) and \$50,000-\$75,000 (21.6 %), followed by less than \$25,000 (16.6 %), \$75,000-\$100,000 (11.4 %), \$100,000-\$125,000 (3.9 %), \$125,000-\$150,000 (2.7 %), \$150,000-\$175,000 (1.6 %), more than \$200,000 (1.6 %), and \$175,000-\$200,000 (0.5 %).

The most reported religion is Agnostic (27.9 %), proceeded by other (26.0 %), multiple religions (15.4 %), not religious or spiritual (10.1 %), Catholicism/Christianity (9.2 %), Atheist (6.0 %), Buddhism (3.2 %), and Judaism (2.1 %). Other religious or spiritual descriptions participants provided include “a mixture of simulation theory, Buddhism, and Transhumanism,” spiritual, Kabbalah, Paganism, Unitarian Universalist, mysticism, Omnism, Animist, Deism, Pantheism, “We are all connected. We are all made from the same stardust and the breath of life. We are nothing and everything all at once and forever,” free spirit, Taoist, Bahai Faith, Potawatomi (Native American), the law of attraction, non-duality, Jain, karma, Wiccan, and

oneness. Spiritualism, or a form of spiritualism, was a prominent write-in response (n=35) and, in some cases, was in conjunction with other selected religions. However, participants predominantly described spiritualism independently of other religious options (n=28). Participants identified as Islam and Hinduism in conjunction with “other” spirituality. Participants responded to levels of religiosity or spirituality using a 10-point scale from 0=not religious/spiritual to 10=very religious/spiritual. Participant responses range from 0 to 10, with a mean of 5.3 and a median of 5.0, suggesting participants are moderately religious or spiritual. Participants responded to political orientation using a 10-point scale from 0=liberal to 10=conservative. Responses range from 0 to 10 with a mean of 3.7 and a median of 4.0, suggesting participants are politically moderate with a slight skew to liberalism. Overall, participants are generally unmarried middle-class Caucasians in their 20s and 30s who are in school or have some kind of post-high school education and work full-time. Most also have moderate levels of religiosity or spirituality defined outside traditional religious dogmas and moderate political orientations.

Event Characteristics and Drug Practices

Table 6.2 presents the descriptive statistics on the music events attended by participants. Over half of the survey participants have attended over 36 music events in their lifetime. Additionally, 16.3 percent of participants report taking psychedelics at over 36 music events. Another 23.4 percent have taken psychedelics at 1-5 music events, and 15.2 percent have taken psychedelics at 6-10 music events. Sixty-three percent of participants report having 1-5 transformative psychedelic experiences at music events. Another 20.2 percent report having 6-10 transformative psychedelic experiences at music events, and 5.1 percent have had 16-20

transformative psychedelic experiences at music events. An overwhelming 83.1 percent of participants responded that their reported transformative psychedelic experience continues to impact them. These responses suggest that individuals can go to music events and take psychedelics, but that does not mean they will have a transformative psychedelic experience. Participants report these experiences as much rarer than the number of events participants take psychedelics at. Although these experiences are rare compared to the number of events participants attend, participants agree that these experiences have long-lasting impacts. These responses also suggest the process of community building. The number of events participants report attending, taking psychedelics, and having transformative experiences indicates that the same people commonly go to festivals and take psychedelics in the same environment together. It is a shared practice in a shared setting with a constant group of people. In the way that Becker (1953) describes learning how to use a drug, the continuous assembling of this group of people in this setting is a process of becoming and learning community.

The most commonly reported type of music event where participants' transformative experiences occurred were large multi-day music festivals with over 25,000 people (33.5 %), medium multi-day music festivals with 5,000-25,000 people (33.3 %), and small multi-day music festivals with under 5,000 people (16.0 %). For participants who selected "other," two responses mentioned Burning Man and a Regional Love Burn as the event. This notation is necessary because the psychedelic community often views these events as art and lifestyle festivals compared to strictly music events. Considering the most common type of event is multi-day events, these responses suggest there is something unique about music festivals compared to single-day shows that contribute to the potential for a transformative psychedelic experience.

Events occurred in 36 different states within the United States, the District of Columbia (n=4), and locations outside of the US (n=16). The five most selected states where events occurred included Florida (n=153), Colorado (n=33), Michigan (n=25), Tennessee (n=23), and Pennsylvania (n=15). Events ranged from as early as 1973 and as recent as May 2022. When defining the approximate event date, some participants identified specific events like Hulaween, Smilefest, Electric Daisy Carnival (EDC) Orlando, and Grateful Dead Deer Creek. Others specified holidays like Labor Day and Memorial Day weekends.

Table 6.3 displays the descriptive statistics for drug use practices reported by survey participants. Sixty-nine percent of participants reported using LSD, 35.6 percent psilocybin, 50.0 percent MDMA/MDA, and 19.2 percent ketamine during their reported transformative psychedelic experience. The survey recorded each drug in a separate question (ex., Did you consume LSD (acid) for this experience?), meaning there was the possibility that some participants could select multiple substances for their transformative experience. I coded participants in binary categories for polydrug use to account for this. I also coded participants into groups based on the drug combinations they reported using during their experience. Polydrug use was even, with 50.9 percent of the participants using more than one drug and 49.1 percent not. The most common drug taken was LSD (27.9 %), followed by LSD+MDMA/MDA (15.9 %), psilocybin (10.8 %), MDMA/MDA (9.2 %), psilocybin + MDMA/MDA (6.7 %), LSD + Psilocybin + MDMA/MDA (5.9 %), LSD + MDMA/MDA + ketamine (5.9 %), LSD + Psilocybin + MDMA/MDA + ketamine (4.1 %), and LSD + ketamine (3.6 %). Figure 6.1 shows participants reported drug and drug combinations for the transformative psychedelic experiences. Participants least commonly reported using ketamine compared to each drug individually, while LSD, psilocybin, and MDMA/MDA separately and in various combinations were more common.

Participants describe LSD doses differently depending on the medium of LSD. For LSD crystals that are dissolved and laid on paper to dry, participants refer to them as hits, tabs, stamps, doses, blotter, or microdots. Participants refer to 10 hits of LSD on paper as a strip. When in gel form, participants refer to it as a gel tab; in liquid form, drops or doses of liquid. A typical measurement that refers to the strength of LSD is micrograms (μg). The reported range for hits of LSD was from half of a hit to 26 hits, for liquid two to seven drops, for μg 10 to 4500 μg . For reference, Erowid (2017a) determines a threshold dose of pure LSD as 10-20 μg , a light dose as 20-75 μg , a common dose as 50-150 μg , a strong dose as 150-400 μg , and a heavy dose over 400 μg .

For psilocybin, most participants identify dose through weight (grams or ounces), others using dose, the type of mushroom (penis envy), the size and number of mushrooms, or parts of the mushroom (cap and stem). Participants also determine the form of taking the mushroom, such as in chocolates, capsules, or tea. Psilocybin doses ranged from one gram to 28 grams. Erowid (2016) identifies an approximate threshold dose of oral psilocybe cubensis as .25 grams, a light dose as .25–1 grams, a common dose as 1-2.5 grams, a strong dose as 2.5-5 grams, and a heavy dose over 5 grams.

Participants describe MDMA/MDA doses in terms of the medium of consumption. Participants report consuming MDMA/MDA as a rock crushed into a powder placed into a capsule, "finger dipped" into a bag, or as a pressed pill. Participants refer to powdered and capsulated MDMA/MDA in terms of weight, such as milligrams and points. Points refer to a fraction of a gram. Pressed pills are known as rolls, pressies, tablets, or the shape of the pill like "Tesla." Reported doses of MDMA/MDA related to weight were 75-1000 mg, and pressed pills were a quarter of a pill to 4 pills. Measuring dose by pills is difficult because every pill will have

a different amount of MDMA/MDA. For example, someone may have a pill that is 400 mg, but they only consume a quarter of it, meaning 100 mg. However, since every pill is different, this measurement does not apply to understanding MDMA/MDA dosage in other pills. Therefore, it is impossible to know the actual doses of MDMA/MDA in participants' pills without laboratory testing. Erowid identifies pure oral doses of MDMA/MDA as threshold (30 mg), light (40-60 mg), common (60-150 mg), strong (150-200 mg), and heavy (over 200 mg) (Erowid 2017b, 2020).

Ketamine doses are difficult to describe as many people snort ketamine in different ways, including bumps from keys or miniature spoons and in lines. Therefore, descriptions of ketamine doses varied based on how participants consumed ketamine. For participants who provided doses through approximate weights, the range was from 30mg to 2000mg and was typically taken incrementally throughout the event. Erowid reports insufflated ketamine doses based on body weight. Approximate total doses including threshold (10-15 mg), light (15-30 mg), common (30-75 mg), strong (60-125), and "the K Hole" (100-250 mg) (Erowid 2022). Overall, how participants report doses of drugs varies by the drug, how participants consume it, and standard measurements. This lack of standardization makes it difficult to compare doses of drugs between participants and their experiences.

Before taking substances, most participants rarely test them with a reagent test kit. Of the study population, 39.3 percent never test their substances, 17.8 percent test them about a quarter of the time, only 12.0 percent test them about three-quarters of the time, and 2 percent test them every time. When looking for sources to learn about drugs (Table 6.4), 195 participants responded with searching internet websites like Erowid and blogs, 181 participants ask their friends, and 150 participants seek out organizations that provide information like DanceSafe or

Bunk Police. Of the 26 participants who selected “other,” some of the responses were podcasts, collegiate educators, medical school professors, self-trial and error, the 12-step community, Students for Sensible Drug Policy, scientific research, books, practitioners of plant medicine, psychiatrists, and others in the festival community. Although participants seek educational information on drug use, there may be a disconnect between being knowledgeable on safe drug use practices and engaging in such practices, such as drug testing.

Mystical Experience Questionnaire (MEQ) Scores and Mystical Experience Groups

The Mystical Experience Questionnaire (MEQ) contains 30 statements measuring four subscales: mystical (M), transcendence (T), positive mood (P), and ineffability (I). Table 6.5 outlines all 30 statements on the MEQ by subscale. Each statement asks participants to rate the degree to which they experienced the statement during their most transformative psychedelic experience at a music festival using a 5-point Likert scale. Previous studies calculate MEQ scores in two ways. One way is adding the Likert scale responses for all statements and dividing the sum by the total possible score. A second way is adding the Likert scale responses for each subscale and dividing the sum by the total possible score for each subscale. Some studies define a mystical experience as scoring 60 percent or more on the total MEQ score, 90 or higher (Bouso et al. 2016). In this analysis, I follow Barrett et al.’s (2015) more rigorous definition of a complete mystical experience as scoring 60 percent or more on all four subscales. Using this scoring method, I grouped participants into one of two groups (yes mystical experience or no mystical experience) for comparative analysis. Additionally, I grouped participants into binary groups for each subscale based on meeting the 60 percent score.

Table 6.6 summarizes the descriptive statistics of the total MEQ scores and the MEQ scores by the mystical experience groups (yes mystical experience or no mystical experience). The mean MEQ score ($n=312$) is 107.3, the median is 109.0, and the standard deviation is 22.5. The mean of participants who scored having a mystical experience ($n=130$) is 124.7, the median is 124.0, and the standard deviation is 12.8. The mean of participants who scored not having a mystical experience ($n=182$) is 94.9, the median is 99.0, and the standard deviation is 19.6. Figure 6.2 is a histogram of the total MEQ scores. The total MEQ scores have a left skew due to five cases scoring below 50, while most cases are between 50 and 150. Figure 6.3 is a side-by-side boxplot of the total MEQ scores by the mystical experience groups. The no mystical experience group has a lower range and median than the yes mystical experience group. I expected this result because the non-mystical experience group has overall lower MEQ scores than the yes mystical group. At the same time, there is some overlap between the two groups, suggesting someone can have a higher overall mystical experience score but not have a mystical experience. This phenomenon is because of requiring an individual to score 60 percent or more on all four subscales of the questionnaire to achieve a mystical experience. An independent Student t-test shows no differences in the MEQ scores between the mystical groups ($t = -15.2$, $df=310$, $p < .001$). Additionally, an independent Student t-test determines there are no differences between the mystical groups for each subscale: transcendence ($t = -19.1$, $df=310$, $p < .001$), positive mood ($t = -4.4$, $df=310$, $p < .001$), ineffability ($t = -7.4$, $df=310$, $p < .001$), and mystical ($t = -10.3$, $df=310$, $p < .001$). The lack of statistical significance between the groups suggests there is not one subscale of the MEQ accounting for higher scores for the yes mystical group. It also suggests no differences in how participants responded to the questionnaire based on whether they scored as having a mystical experience or not.

Table 6.7 summarizes the demographic characteristics of the mystical experience groups. Figures 6.4-6.13 display bar charts and side-by-side boxplots to visually summarize the occurrences of mystical and non-mystical experiences in each demographic group. This overview of demographics is to understand the percentage of participants in specific demographic categories who do or do not have a mystical experience. However, considering the unequal group sizes within some demographic categories, this overview does not speak to the differences between demographic groups.

The mean and median age are the same between participants who had a mystical experience (mean=32.0 years, median=29.0 years) and those who did not (mean=31.5 years, median=29.0 years). Males, females, and non-binary participants have higher rates of no mystical experience (27.0 %, 29.9 %, and 1.6 %, respectively) compared to those of having a mystical experience (16.1 %, 24.8 %, and 0.6 %, respectively). For ethnicity, participants who identify as Asian have more occurrences of having a mystical experience (1.0 %) compared to not having one (0.3 %). Every other ethnicity has higher percentages of not having a mystical experience than having a mystical experience. Participants whose marital status is separated have higher rates of having a mystical experience (0.3 %) than not having one (0.0 %). Single, married, or divorced participants have higher rates of not having a mystical experience (35.3 %, 17.9 %, and 4.5 %, respectively) than those who do (25.6 %, 13.5 %, and 1.6 %, respectively). Mystical and non-mystical experiences are divided equally among widowed participants (0.6 %). All levels of education have higher occurrences of not having a mystical experience than having one. Those who are unemployed and part-time students have higher rates of having a mystical experience (2.3 % and 0.3 %, respectively) compared to not having one (1.3 % and 0.0 %, respectively). The percentages of having a mystical experience and not having one are equally

divided among those who are unable to work (0.3 %). The other employment groups have higher occurrences of not having a mystical experience than having a mystical experience. Participants who make \$125,00-\$150,000 and \$150,000-\$175,000 a year have greater percentages of having a mystical experience (2.0 % and 1.0 %, respectively) compared to not having one (1.3 % and 0.0 %, respectively). Each of the other annual income ranges have higher occurrences of having a non-mystical experience. For religion, those who identify as being Jewish or “other” religion have higher percentages of having a mystical experience (1.6 % and 14.1 %, respectively) compared to those not having a mystical experience (0.7 % and 13.5 %, respectively). Catholicism/Christianity, Atheist, Agnostic, not religious or spiritual, and multiple identified religions have higher occurrences of not having a mystical experience. Buddhism is equally divided between having and not having a mystical experience (1.3 %). The mean and median level of religiosity or spirituality and political orientation are very close between participants regarding mystical experiences. This result shows that religiosity and political orientation are not essential factors in shaping whether someone has a mystical experience. Comparing the demographic groups between mystical and non-mystical experiences shows that it is most common for the groups not to have a mystical experience over having one. I expected this outcome considering more participants scored not having a mystical experience. There are a few exceptions: identifying as Asian, being separated or widowed, being unable to work, being unemployed or a part-time student, having an income between \$125,000-\$175,000, and being Buddhist, Jewish, or aligning with an “other” religion.

In many cases, the differences between demographic categories of having and not having a mystical experience are not significant, but a few are interesting. First, for gender, the percentage of males almost doubles from having a mystical experience (16.1 %) to not having a

mystical experience (27.0 %). Second, for ethnicity, the percentage of having a mystical experience to not having a mystical experience increases for Caucasian from 34.6 percent to 47.7 percent and mixed from 2.9 percent to 6.2 percent. Third, the percentage of participants who are divorced and have a mystical experience is 1.6 percent, which triples to 4.5 percent for those who do not. Fourth, the percentage of participants with a high school diploma and a mystical experience is almost four times greater (6.5 %) than those who do not (1.9 %). Those with a bachelor's degree have a higher rate of not having a mystical experience (18.1 %) than those who do (12.9 %). Participants who work full-time have a higher rate of not having a mystical experience (34.4 %) compared to those having a mystical experience (23.5 %). Participants with incomes of \$25,000-\$50,000 have a higher percentage of not having a mystical experience (24.7 %) than having one (17.7 %). Perhaps one of the most exciting differences between mystical experience groups is those identifying as agnostic or of multiple religions. Eighteen percent of Agnostic participants scored not having a mystical experience, compared to 9.2 percent who did. For participants who identified multiple religions, 11.8 percent did not have a mystical experience, while 4.9 percent did. The bar charts comparing non-mystical and mystical experiences of these demographic characteristics (Figures 6.4.-6.13) highlight the percentage differences in these groups. Overall, most demographic groups have higher percentages of not having a mystical experience.

Factors Contributing to Transformative Experiences

The survey contained a section asking participants to rank the top three factors contributing to their transformative experience. The list included a total of 12 items, four related to the setting (“the music,” “sociability,” “the art,” “my physical environment”), two related to

the set (“how I felt emotionally,” “how I felt physically”), two related to the drug (“the drug itself,” “dose of drug”), three related to mystical elements (“connection to the universe or feelings of oneness,” “ego dissolution,” “philosophical contemplation”), and one “other” category allowed participants to identify missing factors. I analyzed these items using Smith’s *S* Salience Index (Smith 1993) to compute salience scores for each item. The salience index weighs the frequency of each item ranked by the average rank of the factors on the list provided to participants. The salience rank of each factor is an indicator of the association with having a transformative experience. Factors with higher salience ranks are more often associated with having a transformative experience. Table 6.8 shows the 12 items ranked by salience score for all participants who completed the ranking question ($n=331$) and by mystical experience group (yes mystical experience $n=127$, no mystical experience $n=172$).

“Connection to the universe or feelings of oneness” was the most salient factor contributing to participants’ transformative experiences ($S=0.002110$), and “ego dissolution” was the second most salient factor ($S=0.002088$). These two factors are related to mystical elements and are in some way reproduced within the mystical subscale statements of the MEQ. “The music” was the third most salient factor ($S=0.002038$), followed by “how I felt emotionally” ($S=0.002014$), “the dose of the drug” ($S=0.001927$), “sociability” ($S=0.001893$), and “other” ($S=0.001846$). The survey provided participants with a text box to specify other factors instrumental to their experience. Some of the responses included “conversations with strangers and embodiment of my intuition,” the death of a significant other prior to the experience, “third person observation of self,” “strangers stopping strangers, just to shake their hands,” their first psychedelic experience, the behavior of others, feeling socially accepted, feeling accomplished and exploring independence from going to an event alone, friends, “interaction with the divine,”

reflecting on oneself, a sense of purpose, and how everything looked visually beautiful. One participant explained that they ranked “other” as one of their top choices to capture how multiple factors are entangled and depend on each other to create their experience, “My emotions and feelings of oneness made it transformative, but those may not have occurred if I hadn’t taken the drug or were listening to the music.”

“How I felt physically” was the eighth most salient factor ($S=0.001748$), followed by “the drug” ($S=0.001709$), “the art” ($S=0.001687$), “philosophical contemplation” ($S=0.001666$), and “my physical environment” ($S=0.001326$). The survey provided participants with a text box to describe what about the environment was pertinent to their experience. Some of the responses included “the stars aligned,” how the artwork was a part of the festival experience, humanistic experiences with trees, being in nature or feeling connected to nature and nature spirits, “the Deadheads,” the safe, loving, and friendly environment, being with friends or significant others, “lights, people, vibes, energy,” the intricacy of production at large music festivals, “The entire festival atmosphere. The crowd. Music. Energy.” shared experience with the crowd, laser show, visualizers with psychedelic art and images, people in costumes, polydrug use, “permission to completely be myself,” vibrations from the music, being alone, and fire.

For the mystical experience groups, the participants who scored not having a mystical experience ranked the same top three factors contributing to their experience compared to all the respondents: “connection to the universe or feelings of oneness” ($S=0.004049$), “ego dissolution” ($S=0.004044$), and “the music” ($S=0.003898$). Participants who scored having a mystical experience ranked their top three factors differently compared to the non-mystical group. The most salient factor for the mystical group was the “dose of drug” ($S=0.005664$). This factor ranked seventh for the non-mystical group. The second most salient factor for the mystical group

was “connection to the universe or feelings of oneness” ($S=0.005566$). The third most salient factor was “how I felt emotionally” ($S=0.005499$). This factor ranked fifth for the non-mystical group. Despite some differences in the most salient factors between the mystical and non-mystical groups, there is consensus among respondents and groups in ranking “connection to the universe or feelings of oneness” as a top factor. This result is interesting because someone can still attribute this characteristic of mysticism to their experience, whether or not they score as having a mystical experience.

Influential Factors and Mystical Experiences

The top two ranked factors contributing to participants’ transformative experiences for all respondents are measurements of mysticism. Because of this, I expected differences between how participants ranked these factors and having a mystical experience and mystical subscale scores. I expected these differences because the mystical subscale of the MEQ contains statements that relate to these factors, such as “experience of oneness or unity with the objects and/or persons perceived in your surroundings,” “experience of oneness in relation to an ‘inner world’ within,” “freedom from the limitations of your personal self and feeling of unity or bond with what was felt to be greater than your personal self,” and “experience of the fusion of your personal self into a larger whole.” I anticipated that participants who did rank these factors would have higher rates of scoring a mystical experience and meeting the mystical subscale requirements (scoring 60 % or higher) over participants who did not rank them. I also considered differences between the ranking groups for the third most salient factor, “the music,” with the MEQ scores and the other two most salient factors. Table 6.9 summarizes the results of these comparisons.

For the factor “connection to the universe or feelings of oneness,” participants who ranked this factor had a higher percentage of not having a mystical experience (55.1 %) than having a mystical experience (44.9 %). Those who did not rank this factor follow a similar pattern, with 62.8 percent who do not have a mystical experience and 37.2 percent who do have a mystical experience. Overall, those who rank this factor in the top three have a higher percentage of mystical experiences than those who do not rank it.

For the factor “ego dissolution,” participants who ranked this factor in the top three had a higher percentage of not having a mystical experience (55.2 %) than having a mystical experience (44.8 %). Those who did not rank this factor follow a similar pattern, with 59.4 percent not having a mystical experience and 40.6 percent having a mystical experience. Overall, those who do not rank it have a higher percentage of not having a mystical experience (59.4 %) than those who do (55.2 %).

For “the music” factor, both groups have higher percentages of not scoring a mystical experience. Fifty-two percent of participants who ranked the factor did not have a mystical experience compared to 47.1 percent who did. For those who did not rank it, almost double the percentage of participants (65.2 %) did not have a mystical experience over those who did (34.9 %). Additionally, those who did not rank it had a higher rate of not having a mystical experience (65.2 %) than those who did rank it (52.9 %).

Considering two of the three top factors are measurements of the mystical subscale, I compared if people ranked the top three factors and whether they met the requirements (60 percent or higher) on the mystical subscale. For the factor “connection to the universe or feelings of oneness,” all participants had a higher percentage of meeting the score requirements. Eighty-four percent of those who ranked it in the top three scored over 60 percent on the mystical

subscale compared to 67 percent of those who did not rank it. Overall, those who did not rank it in the top three had a higher percentage of not scoring over 60 percent on the mystical subscale (32.2 %) than those who did (15.1 %). Despite the higher percentage for scoring less than 60 percent for those who did not rank it, this group still had over twice the percentage of participants meet the requirement than those who did not.

For the factor “ego dissolution,” both ranking groups have higher percentages of meeting the scoring requirements on the subscale. Seventy-nine percent of the participants who ranked this factor and 77.6 percent of those who did not rank this factor met the requirements for the mystical subscale. However, those who did not rank the factor still have a higher percentage of not meeting the scoring requirements (22.4 %) than those who did rank it (20.7 %). Despite the trend of having higher percentages of mystical experiences and meeting the mystical subscale scoring requirements, those who do not rank “ego dissolution” in the top three factors have lower percentages than those who do rank them.

For “the music” factor, both groups had higher percentages of meeting the scoring requirements for the mystical subscale. Eighty-two percent of those who ranked music as a top factor met the scoring requirement compared to 17.8 percent. Of those who did not rank the factor, 72.7 percent met the scoring requirements, and 27.3 percent did not. Again, those who did not rank it had a higher percentage of not meeting the scoring requirements than those who did. Music is not a measurement of mysticism in the MEQ. However, there are differences between participants who view the factor as influential on their experience compared to those who did not, with higher percentages of having a mystical experience and meeting the mystical subscale scoring requirements.

Overall, the three factors, whether ranked by participants or not, coincide with higher percentages of not having a mystical experience but have higher percentages of meeting the mystical subscale scoring requirements. These results suggest a dissonance between what factors participants contribute to their experience and what the MEQ measures. First, some participants did not identify mystical factors impacting their experience but still had higher percentages of meeting the mystical subscale requirements. Second, “the music” is the third most salient factor but is not a measure of a mystical experience. Third, those who identified mystical factors in their experience still had a higher percentage of not having a mystical experience than having one. These differences suggest that the MEQ may not capture all the factors participants identify in their experience. More factors contribute to the mystical experience score that participants do not rank or are missing from the list of factors presented to participants. The factors of connection, ego dissolution, and music are all linked to the mystical subscale of the MEQ. However, they ultimately do not result in a mystical experience based on the total MEQ score. This result suggests that mysticism, as measured by the mystical subscale, is connected to other external factors not measured by the MEQ. Drawing on Bateson’s (1972) Ecology of Mind argument that the mind cannot disconnect from the systems around it, participants’ transformative experiences are entangled systems of the ecological self, the setting, and meaning-making. Ultimately, this result supports that the context of the music festival matter in these experiences.

Psychological Insight Questionnaire (PIQ) Scores and Mystical Experience Groups

The 23-statement scale contains two subscales measuring Avoidance and Maladaptive Patterns Insights (AMP) and Goals and Adaptive Patterns Insights (GAP). Due to a limitation of

the research, one statement of the AMP subscale was absent from the survey, resulting in thirteen statements measuring the AMP. Table 6.10 displays the 22 PIQ statements used in the study by each subscale. Each statement asks participants to rate the degree to which they experienced the statement related to their most transformative psychedelic experience using a 5-point Likert scale. Other studies using the PIQ calculate the total PIQ scores by summing all statements' response values. The total possible PIQ score is 110. Previous studies determine the scores for each subscale by adding the response values for each statement associated with each subscale. The total possible score for the AMP subscale is 65 and 45 for the GAP subscale.

Descriptive Statistics

Table 6.11 reviews the descriptive statistics of the total PIQ, AMP, and GAP scores. Considering this analysis is interested in the relationships between the MEQ and PIQ, the table also includes descriptive statistics for each of the scores by the mystical experience groups. The mean PIQ score (n=247) is 66.5, the median is 71.0, and the standard deviation is 25.5. The PIQ score mean and median are slightly higher for the mystical experience group (n=116) compared to the non-mystical experience group (n=157) and the total PIQ scores. An independent Student t-test shows significant differences in the PIQ scores between the mystical groups ($t = -3.7$, $df = 271$, $p < .001$). Figure 6.14 is a histogram of the total PIQ scores. The total PIQ scores have a normal distribution with a slight left skew. Figure 6.15 is a side-by-side box plot of the total PIQ scores by the mystical experience groups. The distributions of the two groups for total PIQ scores are relatively the same, with a bulk of participants' scores between 40 and 120.

The mean AMP score (n=274) is 36.9, the mean is 41.0, and the standard deviation is 17.4. The AMP score mean and median are slightly higher for the mystical experience group

compared to the non-mystical experience group and the overall AMP scores. An independent Student t-test shows significant differences in the AMP scores between the mystical groups ($t=3.0$, $df=271$, $p=.001$). Figure 6.16 is a histogram of the AMP scores. The AMP scores do not have a normal distribution. Figure 6.17 is a side-by-side boxplot of the AMP scores by the mystical experience groups. The distributions of the two groups look somewhat similar in that most cases are on the higher end of scores, but both groups have a tail of cases on the lower end of the AMP scores. There are more cases in the lower tail of the scores for non-mystical experiences, meaning participants in that group had lower AMP scores than those with a mystical experience.

The mean GAP score ($n=274$) is 29.6, the mean is 31.0, and the standard deviation is 9.7. The GAP score mean and median are slightly higher for the mystical experience group than the non-mystical group and the overall GAP scores. An independent Student t-test shows significant differences in the GAP scores between the mystical groups ($t= -4.2$, $df=271$, $p<.001$). Figure 6.18 is a histogram of the GAP scores. The GAP scores have a normal distribution with a slight left skew due to a group of cases with lower GAP scores. Figure 6.19 is a side-by-side boxplot of the GAP scores by the mystical experience groups. Both mystical experience groups have a similar score range and a bulk of cases in the middle and higher end of the score range, with a few cases in the lower range. There are more cases in the lower tail of the scores for non-mystical experiences, meaning participants in that group had lower GAP scores than those with a mystical experience.

Differences Between the Mystical Experience Groups

Independent Student t-tests reveal differences between the mystical experience groups and the PIQ subscale scores. Table 6.12 summarizes these results. For the AMP scores, there are differences in the means between the mystical experience group and the non-mystical experience group ($t=-3.0$, $df=271$, $p=.001$). Further, independent Student t-tests reveal that nine of the twelve AMP statements drive these differences: “discovered I could explore uncomfortable or painful feelings I previously avoided” ($t=-1.7$, $df=294$, $p=.041$), “awareness of dysfunctional patterns in my actions, thoughts, and/or feelings” ($t=-1.7$, $df=294$, $p=.049$), “realized how current feelings or perceptions are related to events from my past” ($t=-1.7$, $df=294$, $p=.043$), “discovered a clear pattern of avoidance in my life” ($t=-1.5$, $df=294$, $p=.073$), “realized I could experience memories previously too difficult to experience” ($t=-2.9$, $df=271$, $p=.002$), “discovered how aspects of my life are affecting my well-being” ($t=-2.0$, $df=271$, $p=.022$), “realized ways my beliefs may be dysfunctional” ($t=-2.9$, $df=271$, $p=.002$), “discovered clear similarities between my past and present interpersonal relationships” ($t=-2.5$, $df=271$, $p=.007$), “realized how critical or judgmental views I hold towards myself are dysfunctional” ($t=-3.7$, $df=271$, $p<.001$).

There are also statistically significant differences in the GAP means between the two groups ($t=-4.2$, $df=271$, $p<.001$). Five of the nine GAP statements drive these differences: “awareness of my life purpose, goals, and/or priorities” ($t=-3.0$, $df=294$, $p=.002$), “discovered new actions that may help me achieve my goals” ($t=-2.2$, $df=294$, $p=.013$), “gained a deeper understanding of previously held beliefs and/or values” ($t=-3.1$, $df=271$, $p=.001$), “discovered new insights about my work or career” ($t=-2.8$, $df=271$, $p=.002$), “awareness of beneficial patterns in my actions, thoughts, and/or feelings” ($t=-3.7$, $df=271$, $p<.001$).

Table 6.13 displays the Pearson's r correlations between the total AMP and GAP scores and their corresponding statements with the MEQ scores by mystical experience group. Most correlations are below .500, suggesting moderate to weak correlations between these variables.

Logistic Regression

I used logistic regression to test if the AMP and GAP scores are good predictors for determining if someone has a mystical experience. Based on the weak correlations between the PIQ subscale scores and the mystical experience scores by the mystical experience group, I hypothesize that these two subscales will not be good predictors of mystical experiences. Logistic regression concluded that neither the AMP nor GAP scores are good predictors for determining if someone has a mystical experience. The AMP scores have a 60.8 percent chance of correctly predicting mystical experiences ($R^2=.044$, odds ratio = 1.022, CI [95%] = 1.007, 1.037), compared to a 57.6 percent chance in the null model. The small difference between the null and predictive models means the AMP score is not a good predictor of mystical experiences. The GAP scores have a 64.8 percent chance of correctly predicting mystical experiences ($R^2=.085$, odds ratio = 1.059, CI [95%] = 1.030, 1.090), compared to a 57.6 percent chance in the null model. The small difference between the null and predictive models means the GAP score is not a good predictor of mystical experiences.

Summary

The demographic analysis of the survey data reveals that most participants are Caucasian, unmarried individuals in their 20s and 30s who are middle-class. Most of them have an education beyond high school and work full-time jobs. Participants have a moderate level of religiosity or

spirituality that is often outside the confines of traditional religious definitions and have moderate political orientations. Most participants have attended over 36 music events in their lifetime but reported having only 1-5 transformative psychedelic experiences at these events. While these experiences are rare, participants report that they have lasting impacts. In a clinical study, Griffiths et al. (2011) found 83 percent of participants ($n=18$) rated their psilocybin experience in the top-five most significant experiences of their life. This study does not examine the degree of how transformative the experiences were for participants, but it does recognize that these experiences are somehow impactful. Future research should assess the degree to which these recreational experiences impact people's lives.

Additionally, participants reported high rates of festival attendance and psychedelic experiences, which suggests chemosocialities through learning about psychedelic use and building community and social support in this setting. Most transformative experiences occur at large- or medium-sized multi-day music festivals throughout the United States. Participants also report polydrug use as frequently as single-drug use. The survey also discovered that participants search for information on drugs and drug use practices from various sources but often do not test their substances.

An analysis of the MEQ revealed that most participants did not meet the requirements for having a mystical experience, despite noting that the experience was transformative for them. Additionally, no significant patterns emerged when comparing mystical experience groups across demographic characteristics. The top three most influential factors in the experience were "connection to the universe or feelings of oneness," "ego dissolution," and "the music." While two of these factors are measurements of mysticism, they coincide with higher percentages of not having a mystical experience. However, the higher rates of fulfilling the mystical subscale

score suggest additional external contextual factors not measured by the MEQ influence participant experiences. This finding is important for two reasons. First, it highlights the role of context in participants' transformative experiences. Specifically, it highlights the critical role of music in the context of music festivals. It also highlights the role of the drug's pharmacological effects in creating experiences of ego dissolution and feelings of connection and oneness. These results support Zinberg's (1972) argument that the drug and its pharmacological effects make a difference in experiences. Expanding on Zinberg, the survey results show the entanglement between the contextual element of music at festivals and the pharmacological effects of psychedelics to create these impactful experiences.

Second, although most participants did not score as having a mystical experience, they still ranked ego dissolution as a top contributing factor to their transformative experience. Brouwer and Carhart Harris (2021) argue that dissolving the self is critical to the transformation process. This dissolving allows people to disconnect from one set of self-narratives to rewrite new self-narratives. Ego dissolution is one mechanism that can initiate disconnection from one's ego. Therefore, the survey suggests that ego dissolution is one mechanism that contributes to participants' transformation, whether they score having a mystical experience or not. This finding also supports that transformative experiences do not equate to mystical experiences and that there is a diversity of meaningful and impactful experiences to study. It also suggests that ego dissolution is not solely aligned with mystical experiences but is a compounding factor of other meaningful experiences.

Finally, a comparative analysis reveals significant differences between the mystical experience groups related to the PIQ, AMP, and GAP scores and statements. However, despite these differences, predictive models using logistic regression do not reveal the ability of these

scores to predict mystical and non-mystical experiences. The survey results highlight three significant findings 1) the value of community across psychedelic experiences and music events, 2) the essential role of context in conjunction with the physiological effects of the psychedelic, and 3) ego dissolution as a mechanism for transformation.

An overall trend in the data is a dissonance between mystical and non-mystical experiences. Part of this conflict may come from how researchers have designed and scored the MEQ. The MEQ requires a 60 percent or higher score on each subscale. The ineffability subscale only contains three statements, meaning participants must score high on two of the three statements to meet the scoring requirements. Ultimately, the ineffability subscale may drive the differences between mystical and non-mystical experiences. While I recognize this design as a limitation, I analyzed the data using this subscale and scoring method based on previous applications of the questionnaire to make my data comparable to previous studies. In recognizing that participants identify mystical factors contributing to their experiences aside from having a mystical experience or not, this finding speaks to the value of ethnography in finding salient factors between measuring mystical experiences and the role of context in participant experiences. I suggest further analysis on combining mystical experience measurements with ethnographic inquiry to explore the potential for these connections further.

Table 6.1 Demographic Characteristics of Survey Study Sample

Characteristic	Mean, Median, SD, or % of N	Characteristic	Mean, Median, SD, or % of N
Age	Mean = 31.6 Median = 29.0 SD = 9.4	Employment Status (n=457)	
		Employed full time (40 or more hours per week)	60.0%
		Employed part-time (up to 39 hours per week)	8.5%
		Unemployed	3.3%
		Full-time student	4.8%
		Part-time student	0.2%
		Retired	0.9%
		Unable to work	1.1%
		Self-employed	9.8%
		Multiple Employment Status	11.4%
Gender (n=465)		Annual Income (n=440)	
Male	43.9%	Less than \$25,000	16.6%
Female	54.0%	\$25,000-\$50,000	40.2%
Non-binary/third gender	2.2%	\$50,000-\$75,000	21.6%
		\$75,000-\$100,000	11.4%
		\$100,000-\$125,000	3.9%
		\$125,000-\$150,000	2.7%
		\$150,000-\$175,000	1.6%
		\$175,000-\$200,000	0.5%
		More than \$200,000	1.6%
Ethnicity (n=453)		Religion or Spirituality (n=434)	
African American/Black	1.3%	Catholicism/Christianity	9.2%
Asian	1.8%	Judaism	2.1%
Caucasian	81.0%	Islam	0.0%
Latinx or Hispanic	3.5%	Buddhism	3.2%
Native American	0.4%	Hinduism	0.0%
Native Hawaiian or Pacific Islander	0.4%	Atheist (belief there is no god)	6.0%
Unknown	0.2%	Agnostic (neither belief nor disbelief there is a god)	27.9%
Other	2.2%	Not religious or spiritual	10.1%
Mixed	9.1%	Other	26.0%
		Multiple Identified Religions	15.4%
Marital Status (n=465)		Level of Religiosity or Spirituality (n=424)	Mean = 5.3 Median = 5.0 SD = 2.6
Single (never married)	63.0%		
Married or in a domestic partnership	28.4%	Political Orientation (n=376)	Mean = 3.7 Median = 4.0 SD = 2.2
Separated	40.0%		
Divorced	6.9%		
Widowed	1.3%		
Education (n=457)			
Some high school (no GED/diploma)	1.8%		
High school diploma/GED	9.8%		
Trade school	4.2%		
Some college or university (no degree)	25.8%		
Associate Degree	12.0%		
Bachelor's Degree	32.4%		
Master's Degree	11.4%		
PhD or other professional degree	2.6%		

Table 6.2 Descriptive Statistics of Music Events

Characteristic	% of N
Lifetime Number of Music Events (n=436)	
1-5	4.1%
6-10	6.4%
11-15	7.3%
16-20	8.7%
21-25	6.4%
26-30	8.0%
31-35	3.7%
36+	55.3%
Number of Psychedelic Experiences at Music Events (n=435)	
1-5	23.4%
6-10	15.2%
11-15	12.9%
16-20	12.2%
21-25	7.6%
26-30	8.7%
31-35	3.7%
36+	16.3%
Number of Transformative Psychedelic Experiences at Music Events (n=435)	
1-5	63.4%
6-10	20.2%
11-15	4.8%
16-20	5.1%
21-25	2.1%
26-30	1.4%
31-35	0.5%
36+	2.5%
Type of Music Event for Most Transformative Experience (n=406)	
Large multi-day music festival (over 25,000 people)	33.5%
Medium multi-day music festival (5,000 - 25,000 people)	33.3%
Small multi-day music festival (under 5,000 people)	16.0%
Single day music concert	14.3%
Underground rave	1.7%
Other	1.2%
How Long the Experience Has Impacted Them (n=372)	
One day	0.3%
One week	1.6%
Several weeks	2.4%
A month	0.8%
Several months	6.2%
A year	1.6%
Several years	4.0%
I'm still impacted by this experience	83.1%

Table 6.3 Descriptive Statistics of Drug Use Practices

Characteristic	Frequency or % of N
LSD (n=405)	
Yes	69.1%
No	30.9%
Psilocybin (n=402)	
Yes	35.6%
No	64.4%
MDMA/MDA (n=398)	
Yes	50.0%
No	50.0%
Ketmaine (n=391)	
Yes	19.2%
No	80.8%
Polydrug Use (n=391)	
Yes	50.9%
No	49.1%
Type of Drug (n=390)	
LSD	27.9%
Psilocybin	10.8%
MDMA/MDA	9.2%
Ketamine	1.3%
LSD + Psilocybin	4.9%
LSD + MDMA/MDA	15.9%
LSD + Ketamine	3.6%
Psilocybin + MDMA/MDA	6.7%
Psilocybin + Ketamine	0.8%
MDMA + Ketamine	1.3%
LSD + Psilocybin + MDMA/MDA	5.9%
LSD + Psilocybin + Ketamine	1.0%
LSD + MDMA/MDA + Ketamine	5.9%
Psilocybin + MDMA/MDA + Ketamine	0.8%
LSD + Psilocybin + MDMA/MDA + Ketamine	4.1%
Frequency of Drug Testing (n=275)	
Never	39.3%
About a quarter of the time	17.8%
About half the time	10.9%
About three-quarters of the time	12.0%
Every time	20.0%

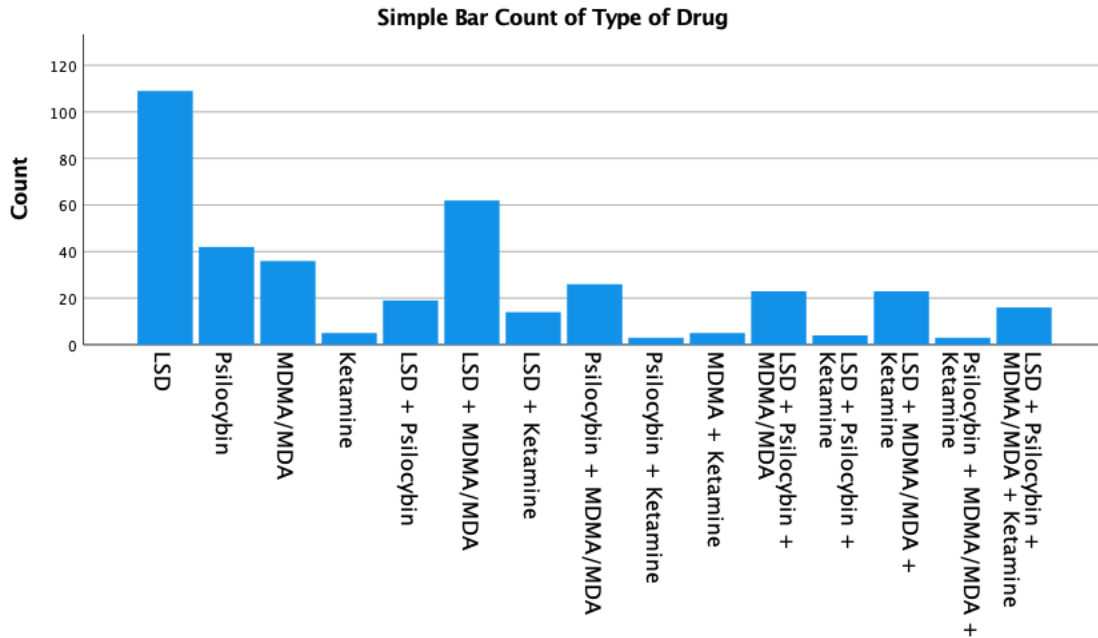


Figure 6.1 Bar Chart of Types of Drugs Reported by Participants

Table 6.4 Sources of Information on Drugs

Sources of Information on Drugs (n=274)	n
There is no one I can talk to about this	9
My family	31
My significant other	83
My friends	181
The internet (Erowid, blogs)	195
An organization that provides information (ex. DanceSafe, Bunk Police)	150
Other (please specify)	26

Table 6.5 MEQ Statements by Subscale

Mystical (M)

Gain of insightful knowledge experience at an intuitive level
Feeling that you experienced eternity or infinity
Experience of oneness or unity with the objects and/or persons perceived in your surroundings
Certainty of encounter with ultimate reality (in the sense of being able to 'know' and 'see' what is really real at some point during your experience)
Freedom from the limitations of your personal self and feeling of unity or bond with what was felt to be greater than your personal self
Sense of being at a spiritual height
Experience of pure being and pure awareness (beyond the world of sense impressions)
Experience of the insight that "all is one"
Experience of oneness in relation to an "inner world" within
Sense of reverence
You are convinced now, as you look back on your experience, that in it you encountered ultimate reality (that you 'knew' and 'saw' what was really real)
Feeling that you experienced something profoundly sacred and holy
Awareness of the life or living presence in all things
Experience of the fusion of your personal self into a larger whole
Experience of unity with ultimate reality

Transcendence (T)

Loss of your usual sense of time
Loss of your usual sense of space
Loss of your usual sense of where you were
Sense of being 'outside of' time, beyond past and future
Being in a realm with no space boundaries
Experience of timelessness

Positive Mood (P)

Experience of amazement
Feelings of tenderness and gentleness
Feelings of peace and tranquility
Experience of ecstasy
Sense of awe or awesomeness
Feelings of joy

Ineffability (I)

Sense that the experience cannot be described adequately in words
Feeling that you could not do justice to your experience by describing it in words
experiences

Table 6.6 Descriptive Statistics of Total MEQ Scores and MEQ Scores by Mystical Experience Group

Characteristic	Mean	Median	Std Dev
Total MEQ Scores (n=312)	107.3	109.0	22.5
Yes Mystical Experience (n=130)	124.7	124.0	12.8
No Mystical Experience (n=182)	94.9	99.0	19.6

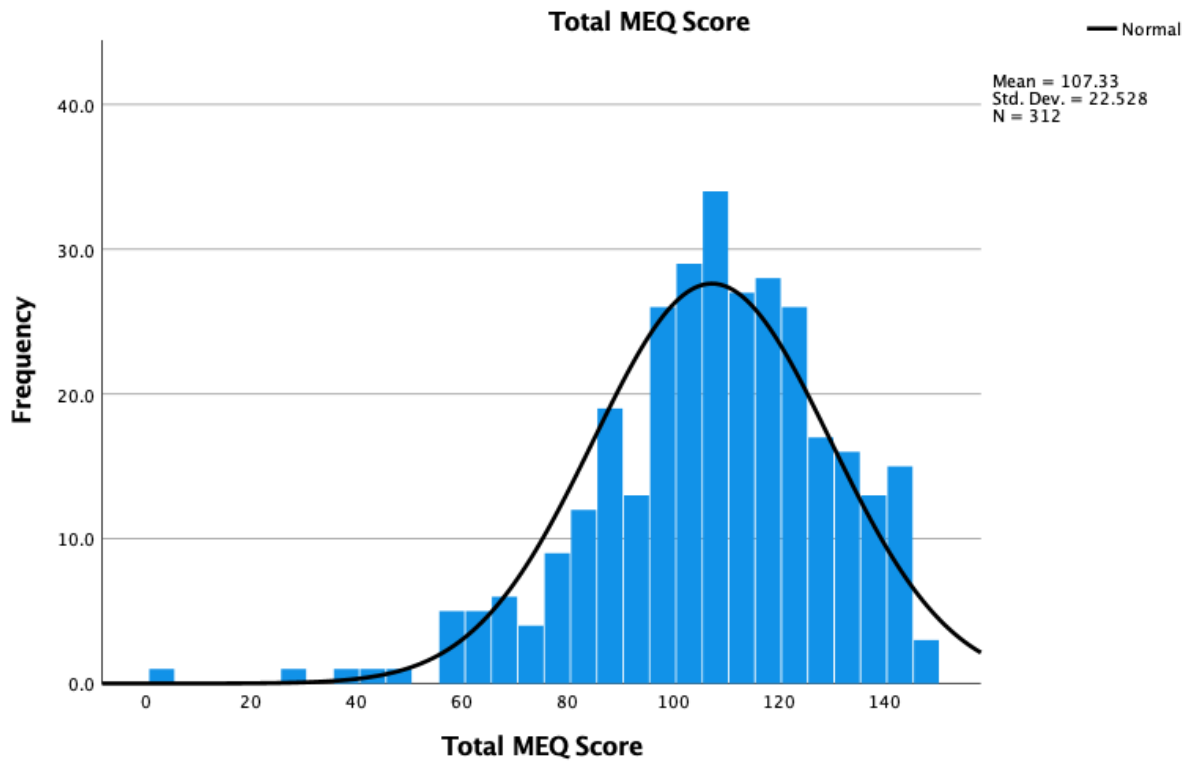


Figure 6.2 Histogram of Total MEQ Scores

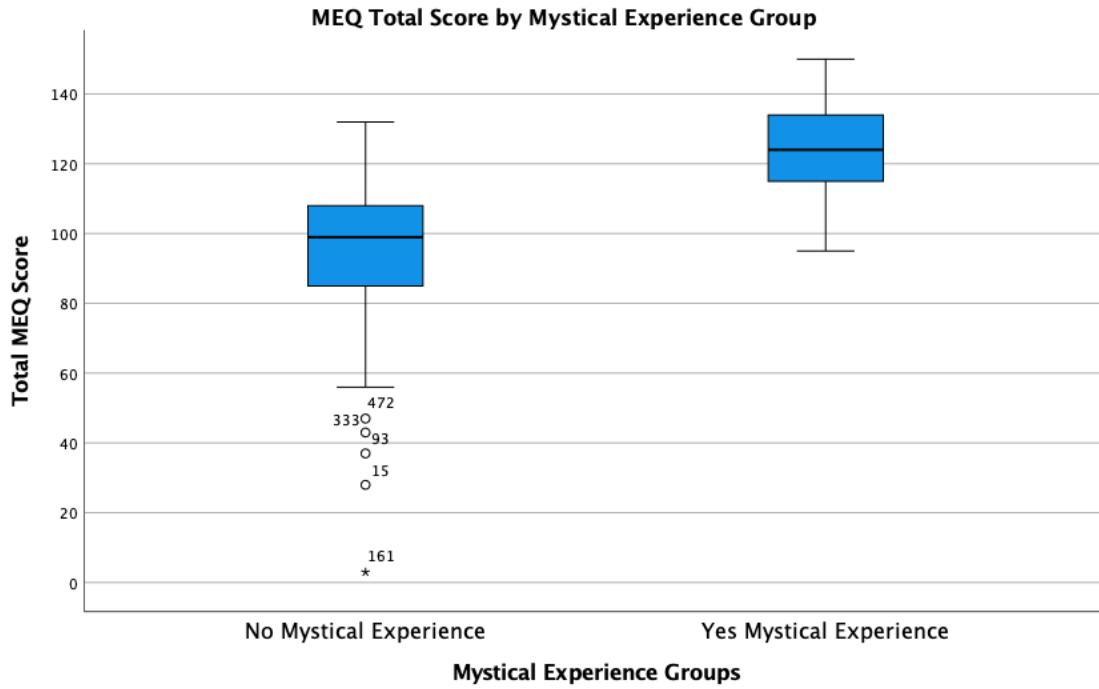


Figure 6.3 Side-by-Side Boxplot of Total MEQ Scores by Mystical Experience Group

Table 6.7 Demographics by Mystical Experience Group

Characteristic	Mean, Median, SD, or % of N		Characteristic	Mean, Median, SD, or % of N	
	Yes Mystical Experience	No Mystical Experience		Yes Mystical Experience	No Mystical Experience
Age (n=312)	Mean = 32.0 Median = 29.0 SD = 10.5	Mean = 31.5 Median = 29.0 SD = 9.4	Employment Status (n=311)		
			Employed full time (40 or more hours per week)	23.5%	34.4%
			Employed part-time (up to 39 hours per week)	4.2%	6.1%
			Unemployed	2.3%	1.3%
Gender (n=311)			Full-time student	2.3%	2.9%
Male	16.1%	27.0%	Part-time student	0.3%	0.0%
Female	24.8%	29.9%	Retired	0.3%	0.6%
Non-binary/third gender	0.6%	1.6%	Unable to work	0.3%	0.3%
			Self-employed	3.9%	5.8%
Ethnicity (n=306)			Multiple Employment Status	4.8%	6.8%
African American/Black	0.3%	0.7%	Annual Income (n=300)		
Asian	1.0%	0.3%	Less than \$25,000	8.0%	9.7%
Caucasian	34.6%	47.7%	\$25,000-\$50,000	17.7%	24.7%
Latinx or Hispanic	1.3%	1.6%	\$50,000-\$75,000	9.0%	12.0%
Native American	0.0%	0.3%	\$75,000-\$100,000	2.7%	6.7%
Native Hawaiian or Pacific Islander	0.0%	0.0%	\$100,000-\$125,000	0.3%	2.7%
Unknown	0.0%	0.3%	\$125,000-\$150,000	2.0%	1.3%
Other	1.3%	1.3%	\$150,000-\$175,000	1.0%	0.0%
Mixed	2.9%	6.2%	\$175,000-\$200,000	0.0%	0.7%
			More than \$200,000	0.7%	1.0%
Marital Status (n=312)			Religion or Spirituality (n=304)		
Single (never married)	25.6%	35.3%	Catholicism/Christianity	4.3%	5.9%
Married or in a domestic partnership	13.5%	17.9%	Judaism	1.6%	0.7%
Separated	0.3%	0.0%	Islam	0.0%	0.0%
Divorced	1.6%	4.5%	Buddhism	1.3%	1.3%
Widowed	0.6%	0.6%	Hinduism	0.0%	0.0%
			Atheist (belief there is no god)	2.3%	3.0%
Education (n=310)			Agnostic (neither belief nor disbelief there is a god)	9.2%	17.8%
Some high school (no GED/diploma)	0.3%	1.3%	Not religious or spiritual	3.3%	4.9%
High school diploma/GED	1.9%	6.5%	Other	14.1%	13.5%
Trade school	2.3%	2.6%	Multiple Identified Religions	4.9%	11.8%
Some college or university (no degree)	11.0%	14.5%	Level of Religiosity or Spirituality (n=296)	Mean = 5.7	Mean = 5.2
Associate's Degree	6.1%	6.5%		Median = 6.0	Median = 5.0
Bachelor's Degree	12.9%	18.1%		SD = 2.4	SD = 2.7
Master's Degree	6.5%	6.8%	Political Orientation (n=267)	Mean = 3.5	Mean = 3.6
PhD or other professional degree	1.0%	1.9%		Median = 3.0	Median = 4.0
				SD = 2.2	SD = 2.1

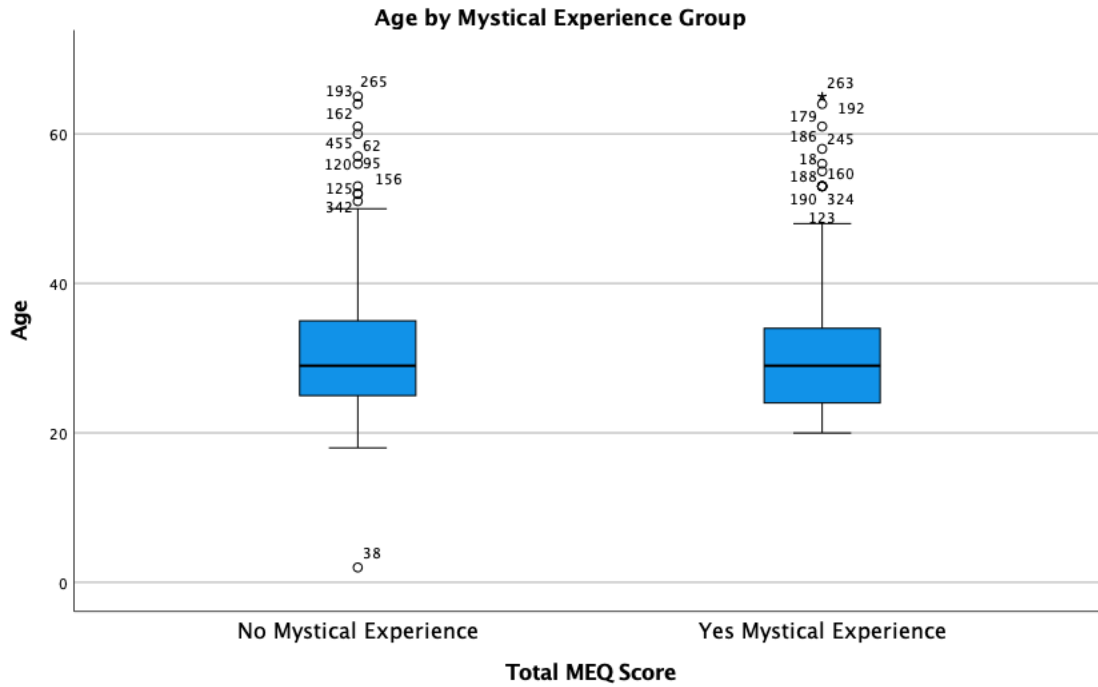


Figure 6.4 Side-by-Side Boxplot of Age by Mystical Experience Group

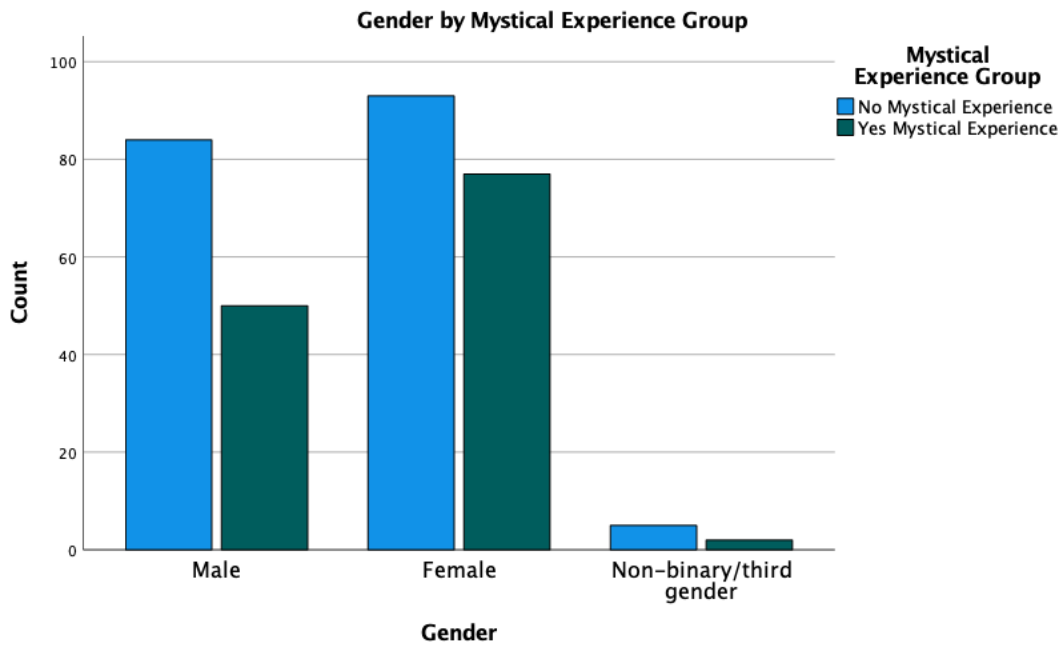


Figure 6.5 Bar Chart of Gender by Mystical Experience Group

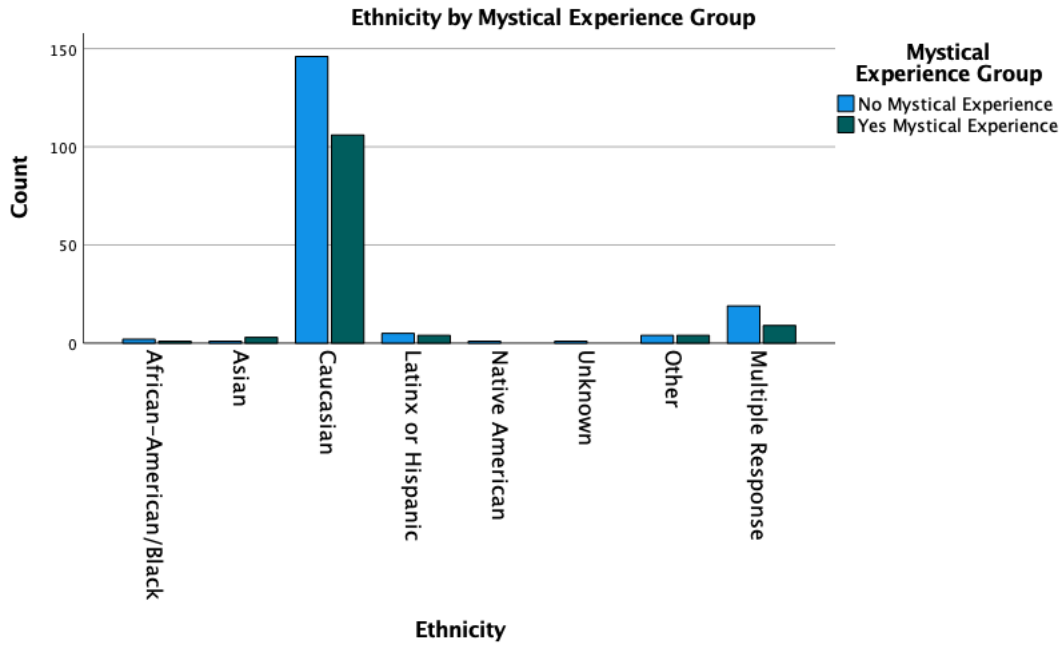


Figure 6.6 Bar Chart of Ethnicity by Mystical Experience Group

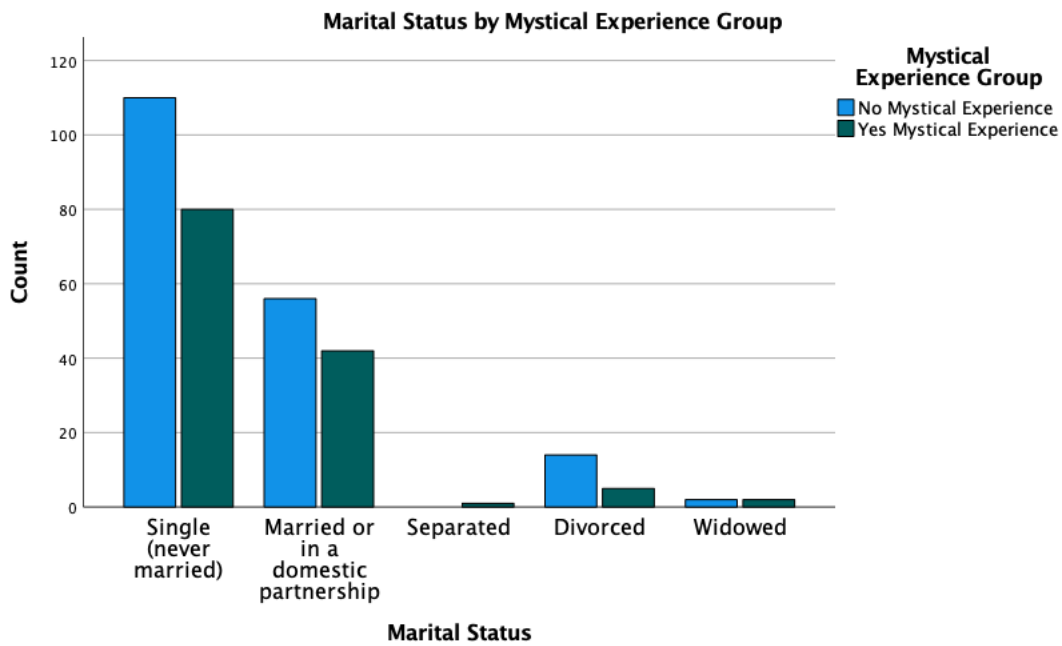


Figure 6.7 Bar Chart of Marital Status by Mystical Experience Group

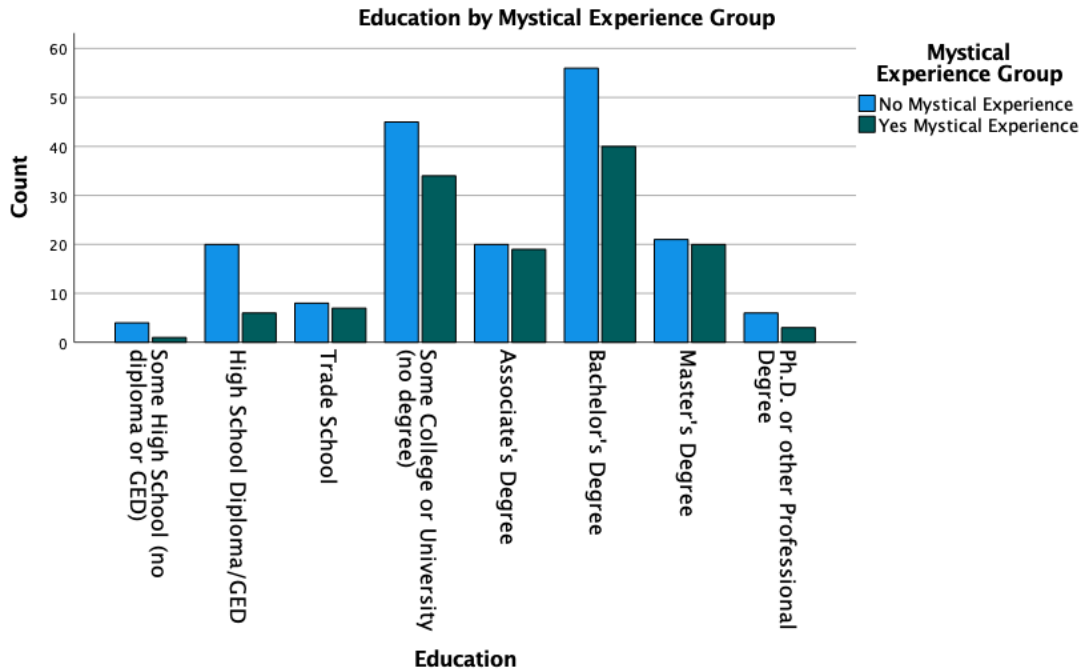


Figure 6.8 Bar Chart of Education by Mystical Experience Group

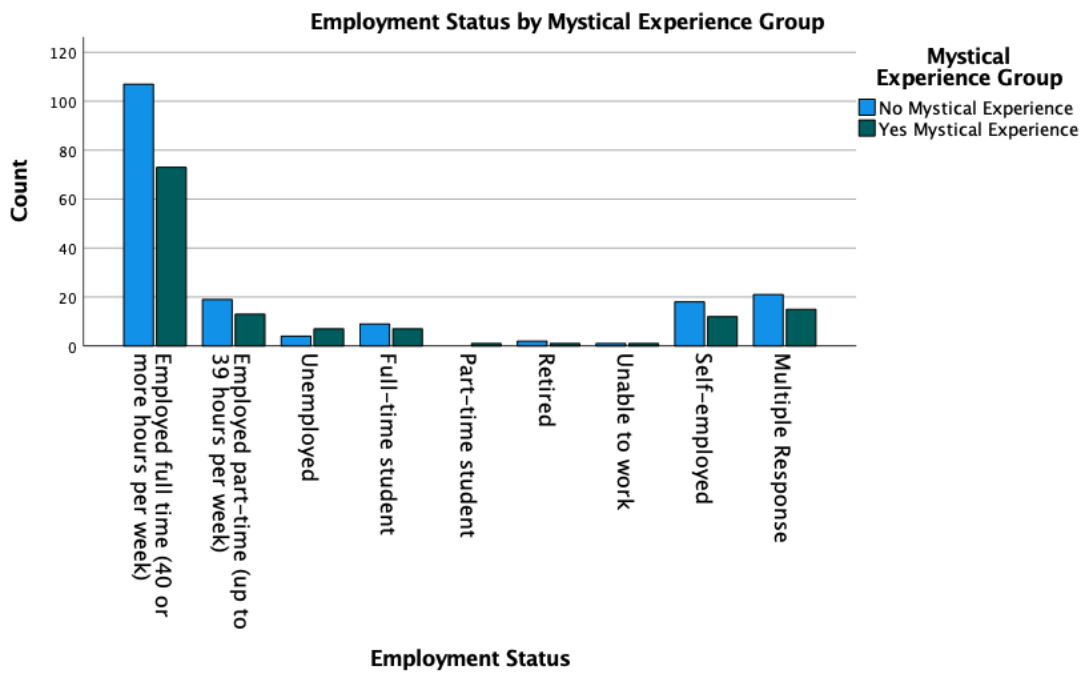


Figure 6.9 Bar Chart of Employment by Mystical Experience Group

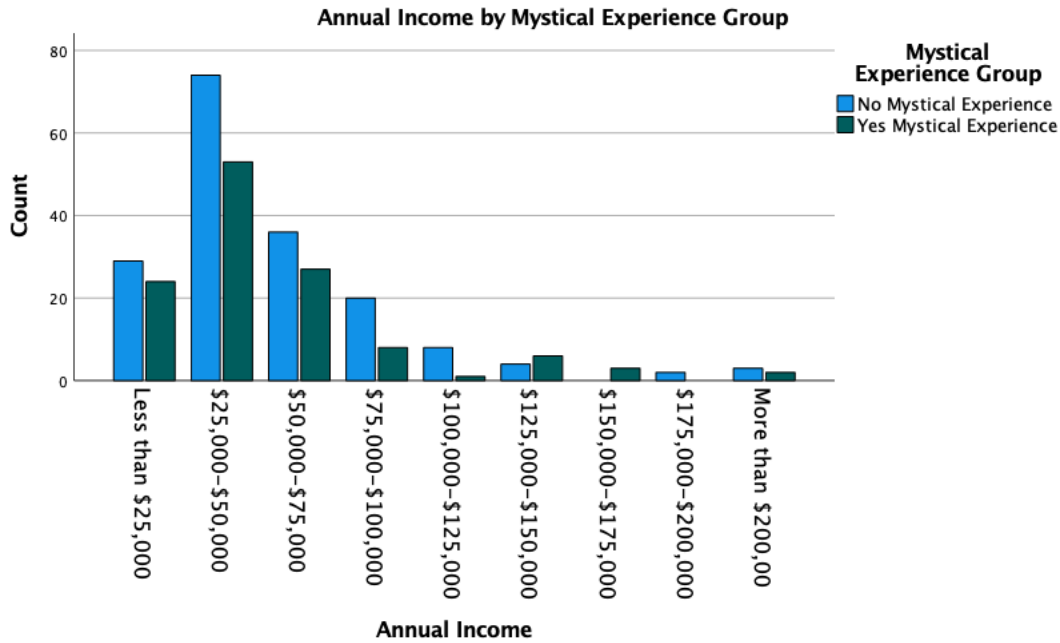


Figure 6.10 Bar Chart of Annual Income by Mystical Experience Group

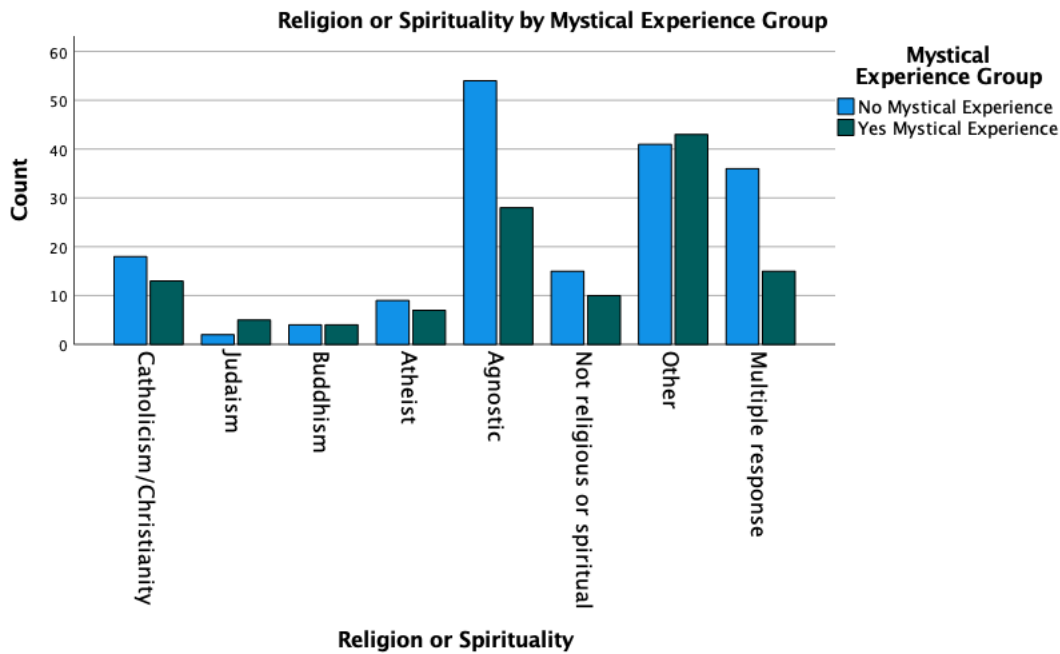


Figure 6.11 Bar Chart of Religion or Spirituality by Mystical Experience Group

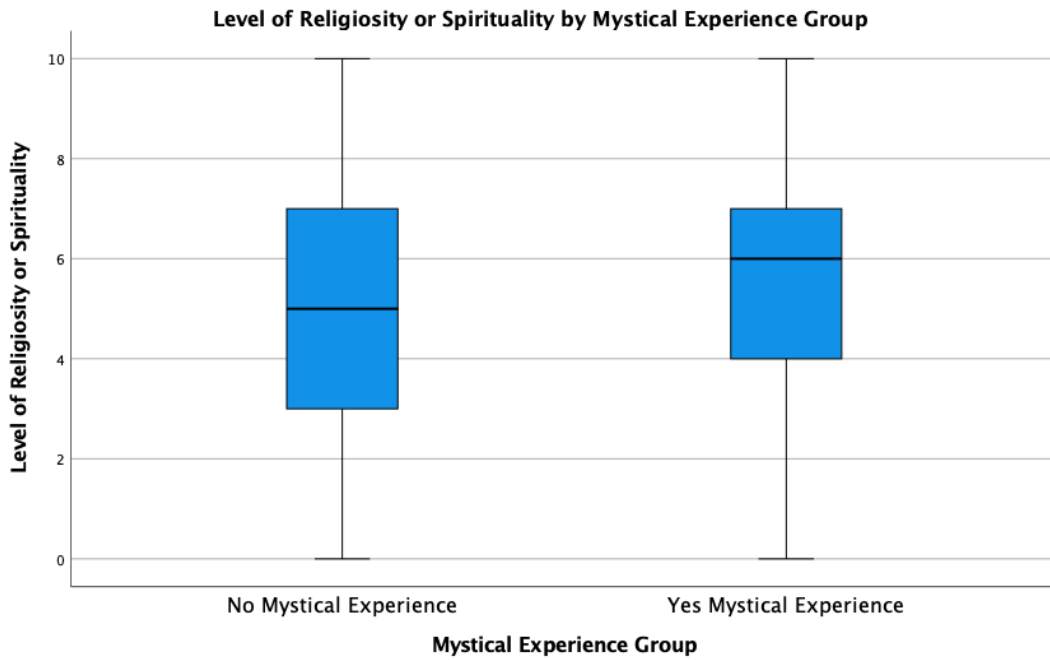


Figure 6.12 Side-by-Side Boxplot of Level of Religiosity or Spirituality by Mystical Experience Group

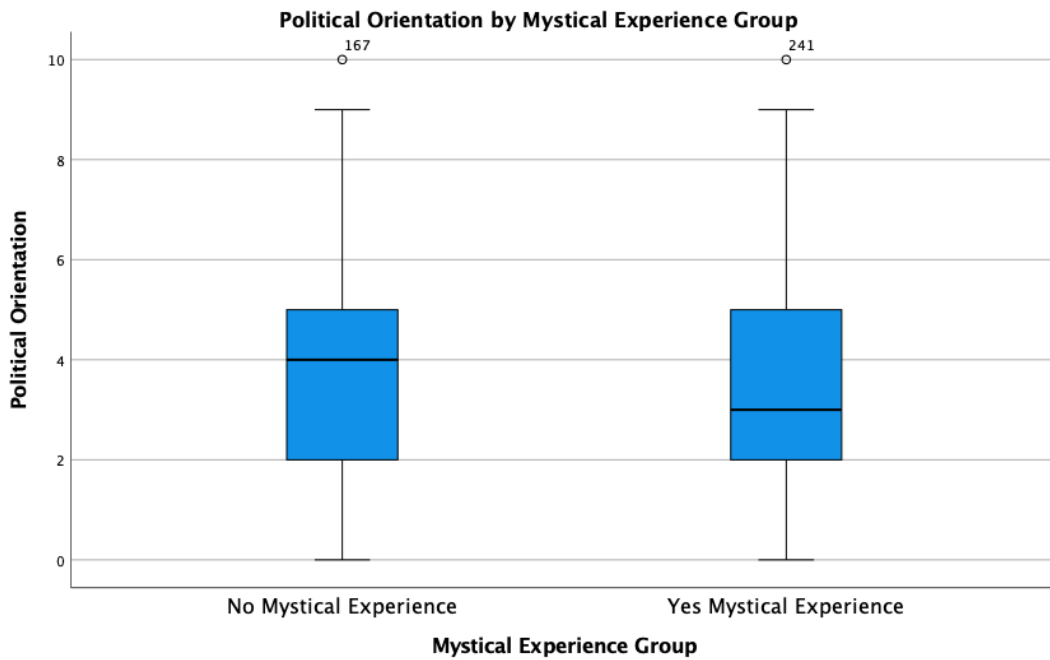


Figure 6.13 Side-by-Side Boxplot of Political Orientation by Mystical Experience Group

Table 6.8 Salience of Factors Contributing to Transformative Experiences

Factor	All Respondents (n=331)			Yes Mystical Experience (n=127)			No Mystical Experience (n=172)		
	Factor Rank	Average Rank	Salience (Smith's <i>S</i> Index)	Factor Rank	Average Rank	Salience (Smith's <i>S</i> Index)	Factor Rank	Average Rank	Salience (Smith's <i>S</i> Index)
Connection to the universe or feelings of oneness	1	1.905	0.002110	2	1.880	0.005566	1	1.911	0.004049
Ego dissolution	2	1.927	0.002088	5	2.026	0.005182	2	1.913	0.004044
The music	3	1.976	0.002038	4	1.963	0.005347	3	1.989	0.003898
How I felt emotionally	4	2.000	0.002014	3	1.905	0.005499	5	2.056	0.003767
Dose of Drug	5	2.087	0.001927	1	1.842	0.005664	7	2.400	0.003101
Sociability	6	2.120	0.001893	6	2.067	0.005074	6	2.179	0.003530
Other	7	2.167	0.001846	11	2.400	0.004199	4	2.000	0.003876
How I felt physically	8	2.265	0.001748	10	2.200	0.004724	8	2.412	0.003078
The drug itself	9	2.303	0.001709	9	2.143	0.004874	12	2.818	0.002290
The art	10	2.325	0.001687	7	2.071	0.005062	10	2.524	0.002861
Philosophical contemplation	11	2.346	0.001666	8	2.080	0.005039	9	2.512	0.002883
My physical environment	12	2.684	0.001326	12	2.625	0.003609	11	2.745	0.002433

Table 6.9 Comparison of Ranking Groups on Salience Factors for Mystical Experiences and the Mystical Subscale Score

	Yes Mystical Experience (%)	No Mystical Experience (%)	Mystical Subscale (%)	Mystical Subscale (%)
Connections to the universe of feelings of oneness				
Yes - rated in top 3 (n=185)	44.9%	55.1%	84.9%	15.1%
No - not rated in top 3 (n=121)	37.2%	62.8%	67.8%	32.2%
Ego Dissolution				
Yes - rated in top 3 (n=87)	44.8%	55.2%	79.3%	20.7%
No - not rated in top 3 (n=219)	40.6%	59.4%	77.6%	22.4%
The Music				
Yes - rated in top 3 (n=174)	47.1%	52.9%	82.2%	17.8%
No - not rated in top 3 (n=132)	34.9%	65.2%	72.7%	27.3%

Table 6.10 PIQ Statements by Subscale

Avoidance and Maladaptive Patterns (AMP)

Awareness of uncomfortable or painful feelings I previously avoided
Discovered I could explore uncomfortable or painful feelings I previously avoided
Awareness of dysfunctional patterns in my actions, thoughts, and/or feelings
Realized the nature and/or origins of my defenses or other coping strategies
Realized how current feelings or perceptions are related to events from my past
Discovered a clear pattern of avoidance in my life
Gained resolution or clarity about past traumas or hurtful events
Gained a deeper understanding of events/memories from my past
Realized I could experience memories previously too difficult to experience
Discovered how aspects of my life are affecting my well-being
Realized ways my beliefs may be dysfunctional
Discovered clear similarities between my past and present interpersonal relationships
Realized how critical or judgmental views I hold towards myself are dysfunctional

Goals and Adaptive Patterns (GAP)

Realized the importance of my life
Awareness of information that helped me understand my life
Discovered a vivid sense of the paradoxes in my life
Awareness of my life purpose, goals, and/or priorities
Discovered new actions that may help me achieve my goals
Experienced validation of my life, character, values, or beliefs
Gained a deeper understanding of previously held beliefs and/or values
Discovered new insights about my work or career
Awareness of beneficial patterns in my actions, thoughts, and/or feelings

Table 6.11 Descriptive Statistics of Total PIQ Scores and AMP and GAP Scores by Mystical Experience Group

Characteristic	Mean	Median	Std Dev
Total PIQ Scores (n=247)	66.5	71.0	25.5
Yes Mystical Experience (n=116)	72.9	74.5	24.9
No Mystical Experience (n=157)	61.7	66.0	25.1
AMP Scores (n=274)	36.9	41.0	17.4
Yes Mystical Experience (n=116)	40.5	43.0	16.9
No Mystical Experience (n=157)	34.1	38.0	17.3
GAP Scores (n=274)	29.6	31.0	9.7
Yes Mystical Experience (n=116)	32.4	34.0	9.0
No Mystical Experience (n=157)	27.6	30.0	9.7

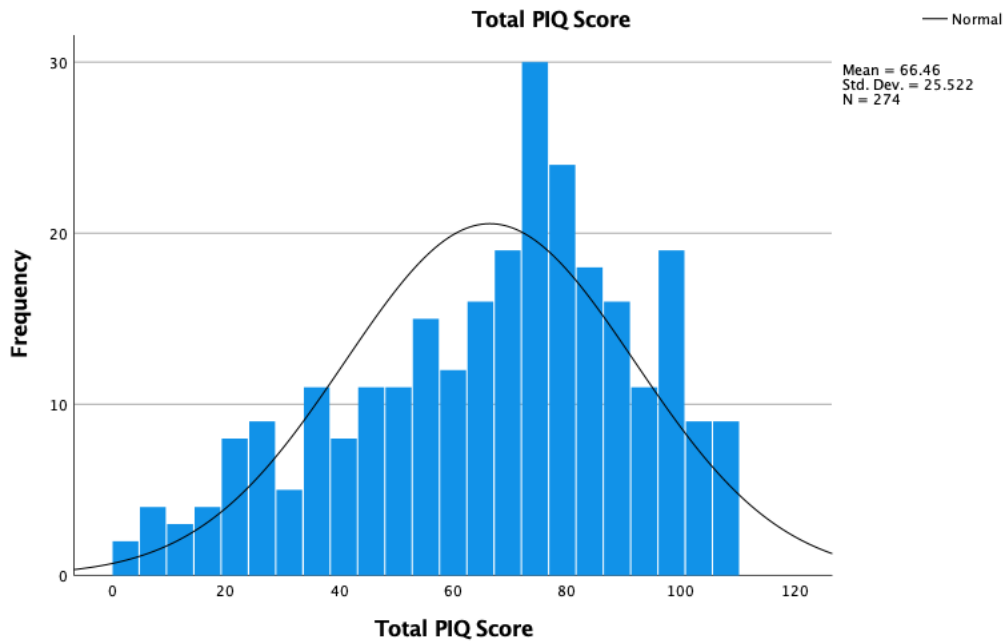


Figure 6.14 Histogram of the Total PIQ Scores (bin width 25)

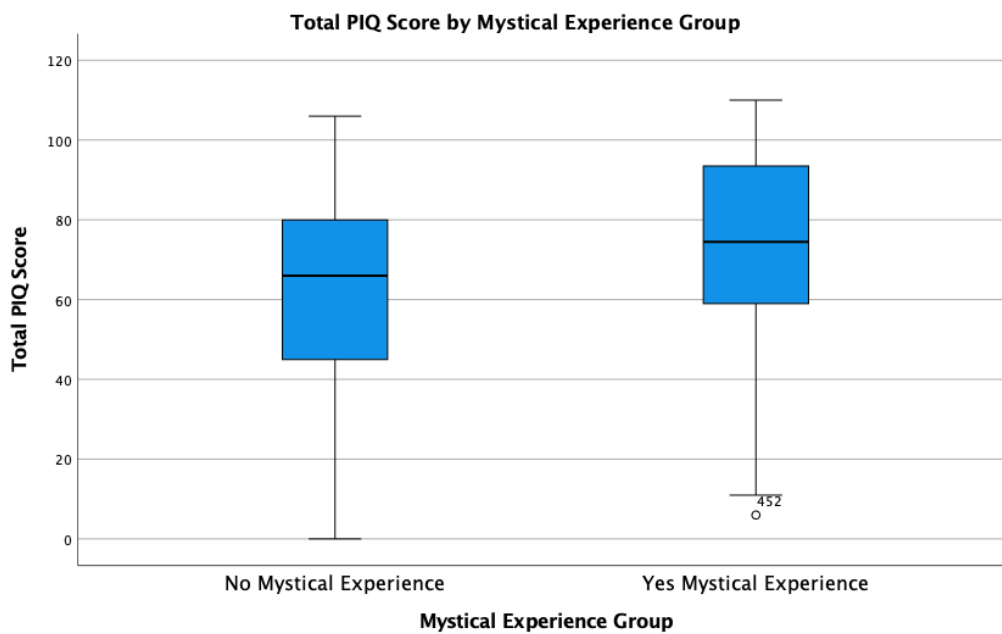


Figure 6.15 Side-by-Side Boxplot of the Total PIQ Scores by Mystical Experience Group

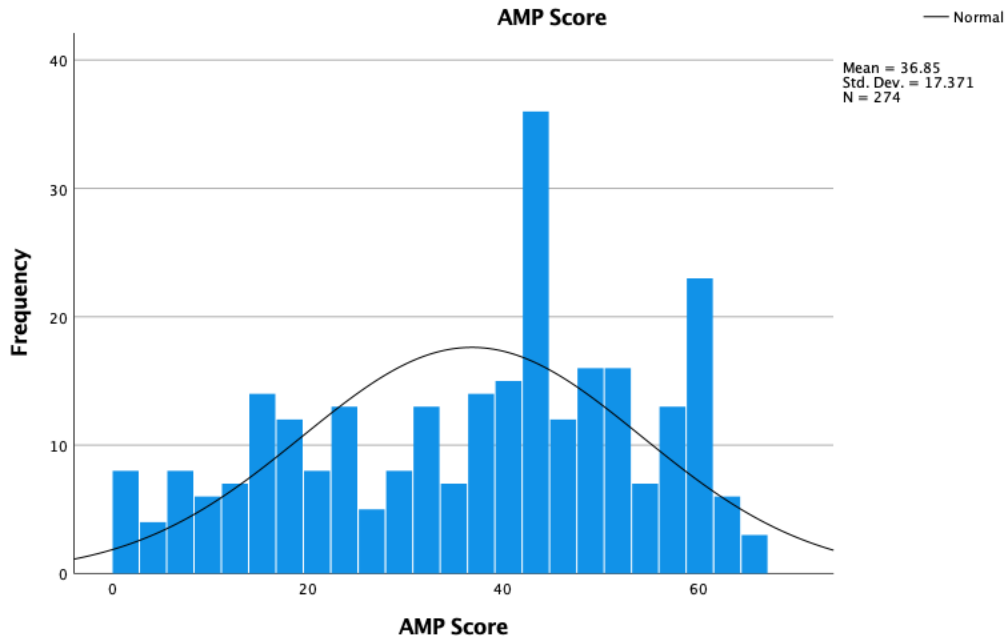


Figure 6.16 Histogram of the AMP Scores (bin width 25)

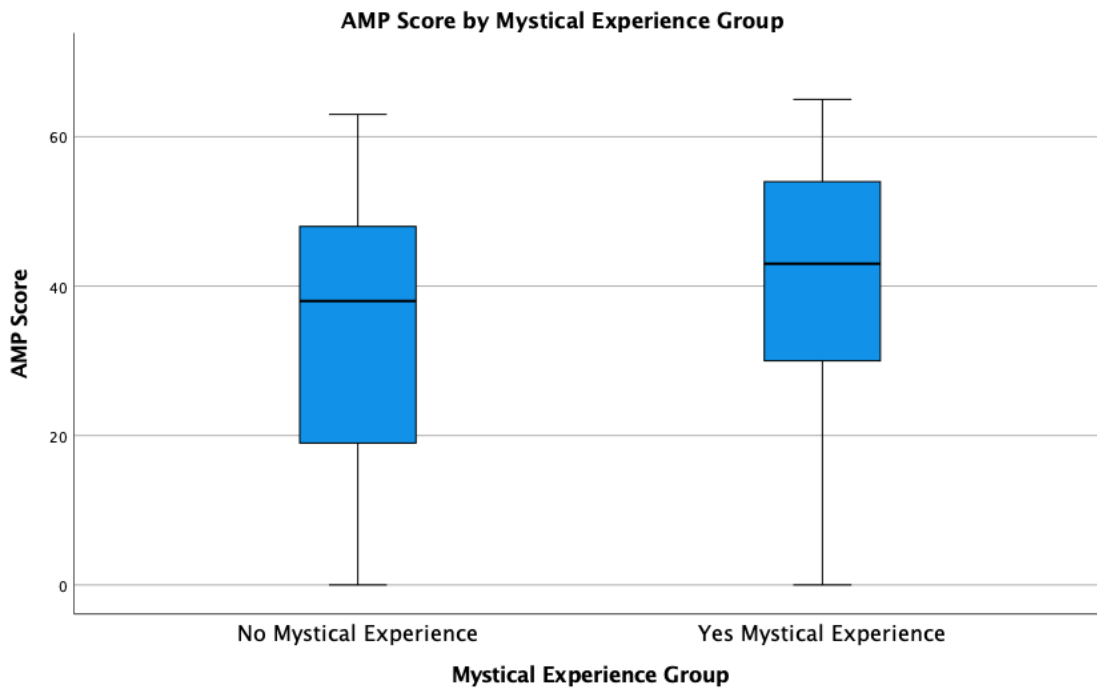


Figure 6.17 Side-by-Side Boxplot of the AMP Scores by Mystical Experience Group

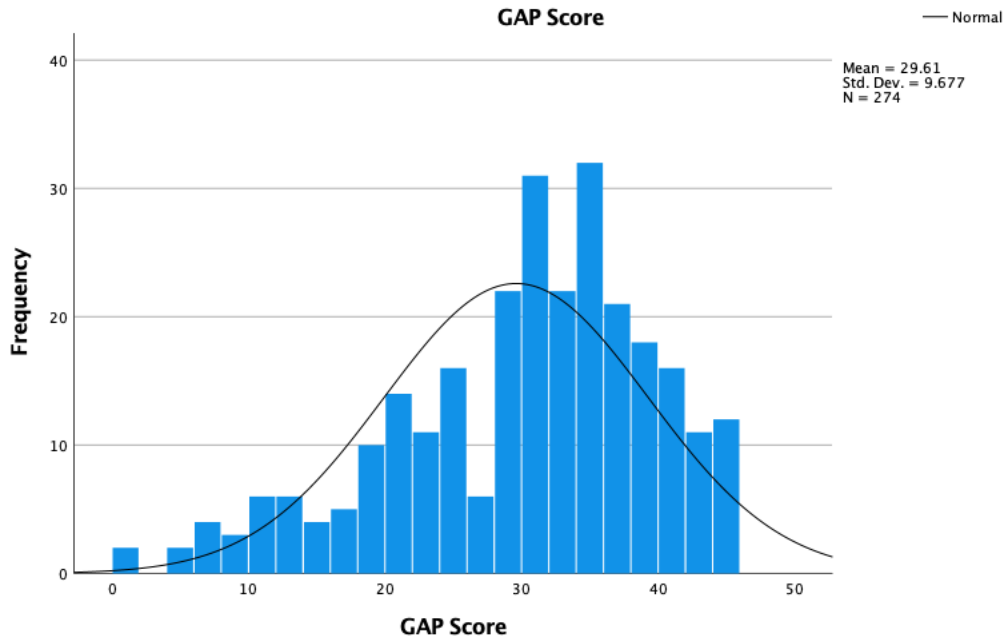


Figure 6.18 Histogram of the GAP Scores (bin width 25)

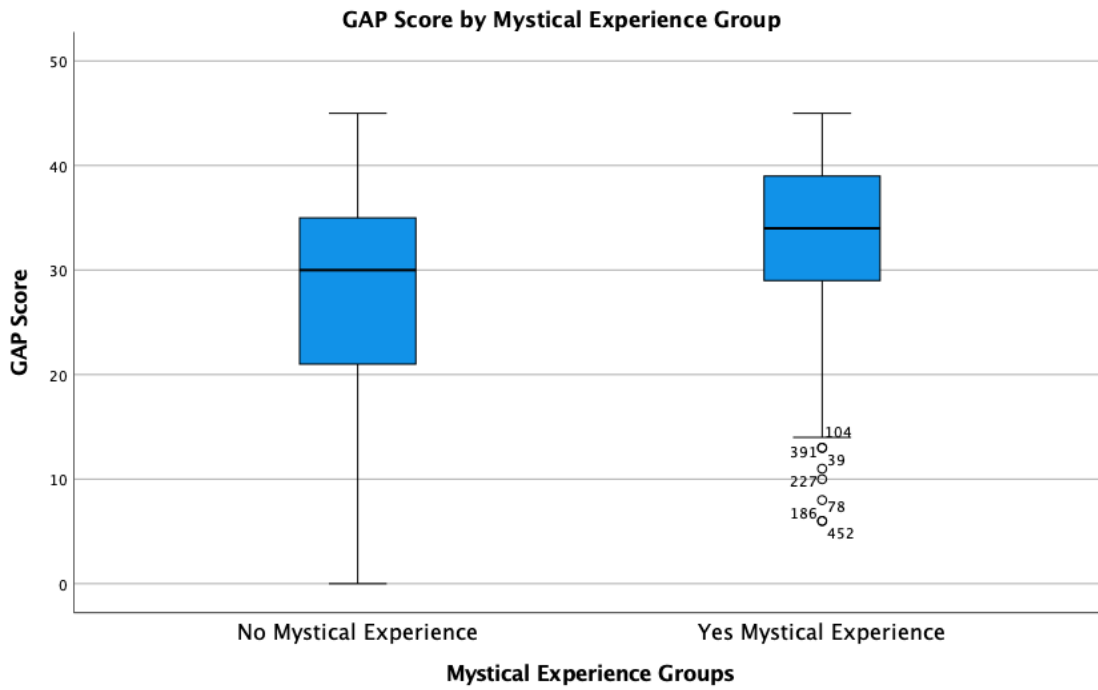


Figure 6.19 Side-by-Side Boxplot of the GAP Scores by Mystical Experience Group

Table 6.12 Student t-tests of AMP and GAP Scores and Statements between Mystical Experience Groups

Statement	df	t	Sig.*	p
AMP				
Total Score	271	-3.0	0.242	0.001
Awareness of uncomfortable or painful feelings I previously avoided	294	-3.5	0.023	<.001
Discovered I could explore uncomfortable or painful feelings I previously avoided	294	-1.7	0.147	0.041
Awareness of dysfunctional patterns in my actions, thoughts, and/or feelings	294	-1.7	0.289	0.049
Realized the nature and/or origins of my defenses or other coping strategies	294	-2.0	0.022	0.024
Realized how current feelings or perceptions are related to events from my past	294	-1.7	0.233	0.043
Discovered a clear pattern of avoidance in my life	294	-1.5	0.249	0.073
Gained resolution or clarity about past traumas or hurtful events	294	-2.9	0.003	0.002
Gained a deeper understanding of events/memories from my past	271	-2.7	0.002	0.003
Realized I could experience memories previously too difficult to experience	271	-2.9	0.465	0.002
Discovered how aspects of my life are affecting my well-being	271	-2.0	0.102	0.022
Realized ways my beliefs may be dysfunctional	271	-2.9	0.096	0.002
Discovered clear similarities between my past and present interpersonal relationships	271	-2.5	0.128	0.007
Realized how critical or judgmental views I hold towards myself are dysfunctional	271	-3.7	0.208	<.001
GAP				
Total Score	271	-4.2	0.13	<.001
Realized the importance of my life	294	-3.5	<.001	<.001
Awareness of information that helped me understand my life	294	-1.8	0.006	0.033
Discovered a vivid sense of the paradoxes in my life	294	-4.5	<.001	<.001
Awareness of my life purpose, goals, and/or priorities	294	-3.0	0.164	0.002
Discovered new actions that may help me achieve my goals	294	-2.2	0.067	0.013
Experienced validation of my life, character, values, or beliefs	271	-3.9	<.001	<.001
Gained a deeper understanding of previously held beliefs and/or values	271	-3.1	0.213	0.001
Discovered new insights about my work or career	271	-2.8	0.445	0.002
Awareness of beneficial patterns in my actions, thoughts, and/or feelings	271	-3.7	0.164	<.001

*Sig>.05

Table 6.13 Pearson's R Correlations for AMP and GAP Scores and Statements by Mystical Experience Group

Statement	Yes Mystical Experience*	No Mystical Experience*
AMP		
Total AMP Score	0.451	0.224
Awareness of uncomfortable or painful feelings I previously avoided	0.249	-0.036
Discovered I could explore uncomfortable or painful feelings I previously avoided	0.282	0.171
Awareness of dysfunctional patterns in my actions, thoughts, and/or feelings	0.328	0.122
Realized the nature and/or origins of my defenses or other coping strategies	0.374	0.194
Realized how current feelings or perceptions are related to events from my past	0.325	0.210
Discovered a clear pattern of avoidance in my life	0.323	0.180
Gained resolution or clarity about past traumas or hurtful events	0.329	0.130
Gained a deeper understanding of events/memories from my past	0.444	0.201
Realized I could experience memories previously too difficult to experience	0.372	0.203
Discovered how aspects of my life are affecting my well-being	0.392	0.271
Realized ways my beliefs may be dysfunctional	0.360	0.152
Discovered clear similarities between my past and present interpersonal relationships	0.427	0.266
Realized how critical or judgmental views I hold towards myself are dysfunctional	0.434	0.248
GAP		
Total GAP Score	0.508	0.475
Realized the importance of my life	0.198	0.368
Awareness of information that helped me understand my life	0.402	0.344
Discovered a vivid sense of the paradoxes in my life	0.423	0.216
Awareness of my life purpose, goals, and/or priorities	0.386	0.357
Discovered new actions that may help me achieve my goals	0.419	0.291
Experienced validation of my life, character, values, or beliefs	0.406	0.443
Gained a deeper understanding of previously held beliefs and/or values	0.371	0.456
Discovered new insights about my work or career	0.313	0.166
Awareness of beneficial patterns in my actions, thoughts, and/or feelings	0.477	0.355
*$p < .001$		

CHAPTER 7:

CONTEXT OF THE DRUG, SET, AND SETTING

Introduction

The importance of context is one of the significant themes that emerge from descriptions of psychedelic experiences provided by participants. This chapter explores the trends in contextual factors related to the drug, set, and setting of participants who had transformative psychedelic experiences at music festivals. The section on drugs covers reports on the sensory and perception changes induced by psychedelics, the undesired or unanticipated effects, drug use practices, and the ascription of agentive qualities to psychedelics. The context of the set reviews the mental and non-physical elements contributing to psychedelic experiences, including preparation, expectations, and cultural beliefs, intentions, trauma and turmoil, mental health and mood, and spirituality. The mind frame that participants enter a psychedelic experience with is instrumental in shaping the outcome of their experience. Part of this influence comes from intentions and a desire for a particular type of experience or outcome, similar to a meaning response. Additionally, a process of transformation in the experience may be working through trauma by becoming with it. Finally, the setting section examines the physical environment, the music, the community, and the vibe of music festivals as instrumental pieces of transformative psychedelic experiences. Participant descriptions of the festival setting mimic those presented in my observations and Kyriakopoulos' (2021) study of psytrance festivals and how they create

spatial liminality. The social setting of the festival also suggests a diversity of chemosocialities from individual social groups to a larger community that spans multiple events.

The data presented in this chapter primarily comes from transcribed interviews and interview notes. I introduce these data using direct quotes and interview summaries. I identify participant quotes using pseudonyms and provide additional context to the participants' identities or backgrounds when necessary. Some open-ended response data from the survey supports the interview data, but I note these instances throughout the text.

Drug

This section reviews the context of drug use at music festivals. It examines the sensory and perceptual changes resulting from psychedelic use, the merging of perceptual changes, how psychedelics create feelings of connection at different levels, undesired effects, drug use practices, and agentic qualities of psychedelics. I draw from a large number of interviews (n=39), but for some of the sensory descriptions, there were a smaller set of interviews that were particularly illustrative.

Altered States of Consciousness as Manifestations of Altered Senses and Sensations

Participants reveal the diversity of sensory changes resulting from different psychedelics and combinations of psychedelics. Discussion on altered sensations ranges from the identifiable senses of sight, sound, touch, taste, and smell to more generalized experiences of physical and emotional changes and distortions in perceptions of time.

Sight

Participants reported taking different psychedelics and combinations of psychedelics. Despite these differences, they provide similar descriptions of visual changes. Many participants mention changes in seeing colors and lights. For example, Brooke describes “the lights being brighter, the colors being more vibrant and everybody having like trails following them. So, it was like, not like I saw any hallucinations, but everything was definitely off and like beautiful.” Interestingly, Joe’s MDMA experience resembles Brooke’s description “Vision - it's more bright, like the lights and everything. You can see, like, everybody looks so much more beautiful when you're on it. And you can really see like all the little pieces of things. Like when you're looking at like a cool shirt or something, all the colors will pop out more or, like, just be more interesting to you.” Kirk also mentions how “lights look better” on MDMA. At the same time, Brooke speaks to the physiological effects of MDMA on the body, stating, “I guess everything was a little blurry because my eyes kept like moving really fast. Like I couldn't really focus on anything.” This quote aligns with the effects of nystagmus or rapid eye movement caused by taking ecstasy.

Roman explains the changes in color perception on LSD differently than Brooke, stating, “I could see, you know, this - it's a color. It's always a color that doesn't exist, you know, but when I'm on a trip, it exists. It's a weird combination of blue, green, and pink. It's all three at once, but each one individually at the same time.” He provides similar details on color alterations under the influence of MDMA, “any source of light is, yeah, got a little bit of a halo and a 3D effect with the halo of the light emanating very close to the object itself. It's almost an entity in and of itself that has dimension and form. Um, and the slight color change as well. So, everything seems to shift towards like being a little bit more blue or a little bit more pink.”

Brooke and Joe highlight how colors become more vibrant, and people look more beautiful, whereas Roman speaks specifically about how colors look different in his experiences.

Other interviews illuminate the unique patterns that emerge from visual changes. Kira speaks to the concept of fractal images she experienced on LSD, “Everything looked like fractals...Everything had like that perfect spiral to it. And like, I could see it in the people's faces and in the night sky and in the clouds and in the musical instruments.” Sebastian describes similar geometric forms while under the influence of mushrooms and LSD, “Looking at the sky, it was just like this whole entire city pattern of a geometrical rainbow, like electrical rainbow and kind of like squares, and like hexagons and things were like, you know, like turning into, like small cities.” Jillian describes more flowing patterns on mushrooms as “the swirlies in the grass.” Scarlet described seeing someone’s face melting of their skull while on MDMA and LSD. Participants describe visual patterns ranging from mathematical geometric designs to flowing and melting patterns. These similar descriptions span across different psychedelics.

Sound

Multiple participants mention how MDMA enhances sounds. Joe stated it makes “everything sound better,” and Kirk specified it makes “music sound better.” Olivia noticed how mushrooms enhanced the music she was listening to while at a Primus show. Roman views the auditory changes on MDMA as a mental process explaining, “things sound better, but I don't know that they necessarily sound different. So, it's more like a mental process that's enjoying that sound more, but it's the same sound.” Some participants perceive hearing things differently, while others view it more as a mental process where they enjoy the experience of hearing things

more. In either case, participants reported increased enjoyment from enhanced auditory perceptions.

Touch

Participants talked about changes to touch on MDMA/MDA. These altered tactile sensations come more from being touched than from touching other things. Joe explains:

“Molly, for example, is one that changes your senses of like touch. So, someone's hand on your shoulder or something feels uh different than when you're sober, obviously, but it's like, it's like, you can tell what the intention is behind the touches and stuff. So it makes it feel more meaningful. And the wind that blows on you or when you use like, um, that Vicks rub on your skin and then someone blows on you or fans you, it feels like a thousand times better than it ever has before.”

This description illuminates how MDMA can alter how someone perceives sensations of touch directed toward them.

Taste and Smell

Participants discussed perceptual changes to taste and smell less than auditory, tactile, and visual changes. Scarlet mentioned that MDMA elevated her ability to taste. Joe notes enhanced sensations related to smell on MDMA, stating, “the little Vicks sticks that you can smell...it wakes you up more...there's like a tingle in your body somewhere.” In explaining her LSD experience, Brooke remembered smelling sage. Since her experience, when she smells

sage, she feels like she is transported back into the moment of her experience. Although participants did not speak to changes in taste and smell as much as other auditory changes, psychedelics still had a recognizable impact on them.

Physical and Emotional Sensations

Along with altered perceptions of the five senses, participants note physical sensations generated from taking psychedelics. Prudence mentioned noticing more things about the body while on mushrooms than when sober. Scarlet recognized feeling hot and sweaty but cool to the touch on MDMA. Brooke mentioned similar physical changes in body temperature on MDMA, “Everything was hot. I was burning up the whole time, and I was a little uncomfortable with how hot I was...A little bit later into the night, probably around 11 o'clock, it started pouring rain...and it cooled us all down.” Roman identifies an unpleasant physical sensation of MDMA, “the inability to urinate for sure... That is very frustrating and, uh, extreme dry mouth.” On mushrooms and MDMA, Jillian noticed changes in her heart rate. It fluctuated from being rapid to normal throughout the experience. Sebastian speaks to how mushrooms and LSD can create relaxed physical sensations, “I think it was the mushrooms doing it to me, but I yawn really, really, really hard. And I felt like I could feel stress leaving my body. I felt my muscles were - I felt more agility. I felt like I didn't have knots in my back, like I wasn't tense anymore...I just feel the energy going through me.”

Joe speaks to vibration as another type of physical sensation on MDMA. These vibrations can shift into emotional sensations experienced on MDMA:

“...what I've always noticed is there's a feeling of anxiety, like in your chest, and you feel like a lot of energy just building up, is how I would explain it. It's just like a lot of energy. It can either turn to like anxiety, or it can turn to like energy, where you dance, or it can turn into like feelings of like intense, like love for your friends or anybody else around you. But physically, a lot of it's like shaking in your chest. Not like a heartbeat, but like, like a vibration.”

Another shifting physical and emotional sensation participants describe on MDMA is euphoria. Kirk discusses being in a “very euphoric heaven” on MDMA. Roman also describes MDMA as euphoric. While speaking with someone at a festival they described their current state on MDMA as “heart opening.” Conversations on vibrations and euphoria blur the lines between sensory changes, physical sensations, and other perception changes.

Time Distortion

The distortion of time is another reported perceptual change from psychedelics. Participants report time slowing down or speeding up. For example, an informant described being on LSD and sitting in front of a stage. Fire blazed from the top of the stage and, at one point, slowed down and then sped back up. Time distortion can also involve reordering time. Oscar described an instance where he was not “experiencing time sequentially” but “in both directions...I looked, and I could see a group of people, like a large group of people, walking to the music...And then they would be walking backwards the way that they had just walked from. So again, I was experiencing time in, in both directions.” Psychedelics can create new perceptions of time by changing its pace or reordering it.

Merging Perceptual Sensorial Changes

Many times perceptual sensory changes merge to create uniquely descriptive experiences. For example, Maria expresses feeling the music while on LSD. Scarlet also describes feelings of being enveloped in the music and letting go of control to the beat of the music while dancing on MDMA. Wade iterates similar sentiments about LSD, stating, “[I] felt really connected to the actual sound and the frequencies I was feeling at the time...like your whole body kind of vibrates from the bass.” Kira takes it a step further to describe synesthesia or cross-talk of the senses on LSD, “I felt like I could see the music coming from the stage towards me... I felt like I could see the things that I was hearing.” Sebastian describes similar feelings of connectedness to the music on LSD, explaining how the venue became the waves of the music notes. Daisy also experienced synesthesia on mushrooms and Roman on MDMA from the lights on the stage.

Another way to conceptualize merging perceptions is by bringing together the expansion of the mind on psychedelics with visual alterations to create interpersonal visualizations. Helen explains such visualizations on MDA. While standing in front of the stage, she closed her eyes. Everyone standing before her turned into light and morphed into a ball of light, forming a “neural network.” At another point in her experience, her eyes were open, and she was watching the stage, but at the same time, she visualized a screen in her mind showing her what her life would look like if she let go of insecurities. Jillian experienced similar internal visualizations while on mushrooms. She visualized the mushrooms digesting, which morphed into more artistic recreations. “In a way, I was, you know, thinking in my head of a lot of like, different, like art scenarios...Like, whatever I was imagining with the music, and it's something I like to do whenever I guess I'm on [psychedelics], I realized. But, um, I don't really do that as much whenever I'm like listening to music, you know, not influenced or anything.”

These visualizations can become more complex, depicting alternative dimensions and encounters in other dimensions. As Oscar describes, “the thing with ketamine too is...it takes you to different places and different dimensions...I think the farthest I've gone is I was; I was literally at the- what I would describe as the energy core of the universe. And it was palpable. I could feel the light energy coming off of source. And I could have like a telepathic conversation with source. And there were other people or entities there in proximity.” Participant descriptions show how perceptual sensory changes are dynamic. They describe experiences from synesthesia to visualization to interdimensional travel.

Connection as a Form of Perceptual Sensory Change

Participants discussed feelings of connection during their experiences. These connections occur on different levels. One level is a deeper connection to the self. Jillian described feeling connected to her physical body on LSD “I’ve really felt so connected with my body. And I have never looked at my body that way. And I felt so connected and in love with it.” Brooke’s experience speaks to how auditory changes on MDMA and her connection to the music made her feel more in tune with her body. “I made sure to get up real close to the speakers, and we could feel the vibrations, and like, it was so loud...it felt really good. Like it, it helps to dance to the rhythm...Like I just, like, felt it in all my bones, and it just helped me like flow and move.” Jillian and Brooke describe how psychedelics allowed them to connect to themselves and the feelings of their body.

Another level of connectedness is feeling more united with things like nature and other people. Lydia discusses a sense of connectedness to nature. She describes feeling connected to everything while on LSD, specifically the surrounding trees. Jillian also felt very connected to

the nature surrounding her. “I remember I saw an ant, and I connected with this ant so hard. I was looking at it on my finger. And I was like, ‘Hey, buddy, like, we're a part of this same universe, and we're a part of this system together.’” In Wade’s psychedelic experiences, his altered perception of his environment changed his connection and outlook concerning everyday things. “Everything that you see on a regular basis, you become more grateful for, you feel more connected to, you are more appreciative of. I don't want to say it makes things look better because it's not just that simple, but you see them from a different lens; can appreciate it more as a result.” Others talk about feeling more connected to people. Oscar describes a ketamine experience that united his friends:

“It felt like consciousnesses had merged in a, in a tornado. And it was like, we all could touch and feel and experience each other's consciousness in the tornado, but like we didn't have, we didn't have control of it cause the tornado kind of just took it and spun us around. So, you could- you had moments and bits and pieces of feeling and seeing through their eyes and feeling through their life experiences...ketamine, in a, in a shared environment is traveling together.”

In Glenn’s experience on MDMA, he discovered a deep sense of connectedness with his friends. He could feel the “palpable energy with the crowd.” These participants describe how psychedelics make them more associated with the physical and social environment around them.

A higher level of connection participants talk about experiencing is that of oneness and with a greater or higher force. Oscar explains, “psychedelics tap into parts of your psyche and parts of the collective consciousness that are difficult to tap into under a normal state of

consciousness.” Cassidy’s and Francis’ experiences reiterate feeling a sense of oneness, feeling connected to the crowd, the universe, and everything else simultaneously.

Tracy defines oneness as “we’re separate, but we’re not. We are all one organism.” Oscar described his feeling as “a feeling of oneness ... it felt like I was connected to everything and everyone...that just made my whole being smile.” Participants describe the oneness as a “feeling of magic.”

Wade expands on universal oneness by stating, “I feel like there's a certain force...that exists within the universe...just some sort of like aspect of the universe that transcends all the physical aspects. Maybe you can think of it as like a certain dimension to it...a spiritual-like force that exists that all life and consciousness sources from and isn't readily apparent...And I feel I've experienced them.” Other participants related the feeling of love to the experience of oneness. Jillian explained, “I felt very connected to the universe...I also just felt like really loved and like really connected.” Glen Norman describes his ego death experience on MDMA as a sense of joy and love expanding through everything and everyone “Just a total soul transforming earth-shaking moment, again of just pure, pure love.” Glen’s description highlights the effects of MDMA as a drug but also speaks to the complexities of how those sensory changes merge with other elements, like the people around him. This example combines the drug and social elements of the context, creating a chemosocial drug.

While participants describe the connection with oneness, Roman presents a fascinating conflict between connection and disconnection during his experience with LSD, where he struggles to disconnect from the ego to connect with the oneness:

“I think it's - because I believe that I don't truly exist. At least not - I'm not what this is [pointing to body] -my thoughts, feelings, emotions, concepts, ideas, any of those things, but that is who my ego thinks I am. And it's my ego fighting back in these moments so that when I feel I'm being pulled like I can't take it anymore- It's, it's almost like, uh, that's necessary for me to give up and let go and release, uh, because it's, there's a part of me still my ego that doesn't want to let go of the things that I feel make me, me. And I'm proud of certain characteristics and accomplishments and relationships and things that I have and, uh, maybe objects, whatever, skills, things that I want to, that I assume are my identity. And something happens in those moments where I, I guess I feel connected or free to, to finally join like the [whatever], but then my ego is pulling me, pulling me back. Um, and also the, the intensity of the, of the suffering in those moments that it just feels like it's a, uh, yeah, not an explosion, definitely feels like a ripping apart.”

Roman is explaining the conflict of experiencing ego death. In the moment of ego death created by psychedelics, he feels relief in merging into the oneness while feeling pulled back by his ego or his sense of individual identity. This conflict creates a feeling of being pulled in two different directions during the ego death experience until he releases his ego and lets it dissolve into the oneness. These reflections point to varying levels of connection participants experience while on psychedelics, including the personal, environmental, social, and spiritual.

Undesired and Unanticipated Psychedelic Effects

While some effects of LSD are enjoyable, some participants discussed the undesirable effects. Sometimes these effects cause physical discomfort. Wade expresses feeling sick, “There

was, like, certain moments of discomfort...like, just nauseousness...and it was just like, for brief moments.” This feeling did not define his entire LSD experience but was undesirable. Jillian describes a similar sensation of nausea when first feeling the effects of mushrooms and MDMA. “I only threw up a little bit, but I did throw up, so I was like, ‘ugh.’” Oscar speaks to choosing ketamine over mushrooms and LSD to avoid the discomforting effects. “If I take LSD, like, I know I’m in for like a 10-hour thing. And if five hours into it, I’m like over it...Like there’s nothing else I can do. And with mushrooms...sometimes I’ll get like a body discomfort with mushrooms, and it really fucks up my trip....But with ketamine...there’s no come-up. You just slip into it. Then like an hour later, you slip out of it. And it’s short, and it’s powerful.”

Along with the long time frame for LSD, as Oscar mentions, there is the potential for very challenging experiences. Roman shares one unpleasant experience with LSD:

“My teeth fell out. I swallowed them, you know, they were completely gone. I couldn’t; I was in extreme physical pain. I couldn’t hold any of my objects. My phone. My glasses. Everything was stuck inside of me. And I could feel it, but it was painful, almost like it had been just magically, you know, transported itself into my body, and it was sticking out. And it was all of these, you know, physical hallucination kind of things that, um, yeah, it didn’t feel good. I was, there was both mental and physical pain....It’s just like under the surface of my skin...it’s kinda like a, a pain, but not a pain as in like I’m sitting there cringing, and I can’t function or whatever. It’s a weird dull kind of numb but very noticeable. Just full body. Yeah. Pain, itch, stinging kind of sensation...I was holding my glasses like, like this and this part, [pointing to a part of the frame and using his glasses to display how his glasses intersected his hand]. It like shifted straight through the middle,

but the way it felt was kind of like the pins and needles, tingly thing, not painful, but also it's inside of me, so it's very sensitive...yet not like excruciating at the same time.”

This detailed description is interesting because it combines the physical sensations with the visual effects of LSD, creating an emotionally stressful experience for him. Isaac describes an experience with LSD and MDA that also mimics the sometimes mental challenge of psychedelics:

“That was kind of like a recurring theme for the night for me mentally was like, a mental checklist of trying to make sure that I'm having a good time, which was pretty funny because obviously if you're; if you're having a good time, you're not making sure that you're having a good time, but when you're in those states, you know, you, you're trying to like... especially when you're fighting it, you're trying to push, and you have this, this mental, uh, it almost feels like you are in your own way. And, uh, I didn't know it at the time, but I certainly was.”

Some experiences may not be necessarily undesirable, but more like not what someone was anticipating. For example, one person I spoke with while handing out flyers explained an LSD experience where she had a lot of overwhelming visuals and started thinking she was in a simulation while contemplating reality. The experience was not hostile or uncomfortable. She described it as “weird.” She spent a portion of her trip spelling out the word weird repeatedly because it was odd for her.

Sometimes the undesired effects of psychedelics occur after the experience is over. As Kirk describes with MDMA, “you get that euphoric heaven state...but then, you know, a day or two later, you know, you feel like the total opposite, you know, because you're just depleted of all your...[serotonin].” Not everyone has the “Monday Blues” from MDMA. Instead, Jillian has the opposite experience explaining, “I didn't feel that sad like depressed after that...I felt like I'm ready. It was a nice reset. It kind of, you know, really lifted me up.” Undesired effects can range from powerful visualizations and uncomfortable physical sensations to unexpected or weird experiences and unwanted aftereffects.

Drug Use Practices

People make decisions on what drugs to use at music festivals based on personal preferences, what their friends are taking, and their perceptions of the purpose and use of each drug. Blake discusses his personal preferences for taking psychedelics in public spaces. “Sometimes you just want to have fun, and small doses can be amusing. You can experience beauty differently. A part of my safety protocol to take psychedelics publicly is experiencing or learning the lay of the land, if you will. So, once you do that, and you familiarize yourself with the lay of the land, adding recreational doses of psychedelics can make it like a playground.” He speaks about how he likes to use smaller doses to familiarize himself with the psychedelic effects in a public space.

On the other hand, some people choose to avoid psychedelics. For example, an informant at a festival explained that he only smokes cannabis and finds he can “get there without drugs,” meaning he can get into the same mental headspace as when on psychedelics without them. Another informant only drinks caffeine at festivals but chooses not to use any psychedelics.

These examples support how personal preferences for specific drugs or doses shape how people take drugs at festivals.

Sometimes, people attend festivals with plans on what drugs they will take throughout the event. Other times people make plans based on what their friends decide to take. Brooke explains how she and her friends decided when to take LSD at a multi-day camping festival. “We had planned it out like even before we went. We wanted to take it Saturday night so that way we can enjoy like the peak of the festival. Because that's really when everything is popping off, I guess, is like Saturday night. Everybody's partying, having fun before they have to leave on Sunday.” Wade thinks social groups influence drug use decisions along with personal preferences:

“It's a little bit of both. It just kind of depends...But I think most of the time, people kind of do their own thing. But especially for longer festivals, like three-day festivals...Or you have a group, and there can be a little bit more coordination. You can talk before, make plans to do that, like as a group, and be on the same page. But even if that's the case...even if they were on the same chemicals, they're not necessarily gonna be on the same doses, like drinking, smoking into all that. So very rarely is anybody like 100% aligned in terms of what they're doing.”

Brooke and Wade explain how social influences influence drug use choices. At the same time, Wade describes how everyone uses drugs differently and ultimately has individual experiences.

Other participants use specific drugs because of their perception of how or why to use them at a music festival. This pattern goes beyond Zinberg's concept of the drug and how people use it and considers how perceptions of such drugs influence practice. Overall, participants

generally viewed MDMA/MDA as a “party drug” over one for spiritual or transformative applications. Joe supports this trend stating, “I feel like psychedelics, aside from Molly and ecstasy, are not like a party drug.” Roman holds a similar perspective on MDMA, stating, “I don't think it's {MDMA/MDA} usually used, um, as a vehicle for a transformative experience. It seems to be more like a, a party kind of drug.” Kirk mentions, “for the concerts, music, MDMA is a much better drug for that.” Wade also identifies powdered drugs as unproductive to spiritual practices. “At this point, I don't like to do those powder ones [MDMA, sass, ketamine, cocaine]. I don't feel like those ones are spiritual tools or guides.” At the same time, Wade recognizes their application in clinical settings and cites the research on using ketamine in clinics. However, he states he does not understand how to use them to benefit himself. While participants do not view MDMA/MDA and powdered drugs as consciousness tools, they support mushrooms for such purposes. Kirk explains, “The natural like mushrooms, I feel like that's a little more transformative.” Joe conveys a similar position stating, “I feel like mushrooms if I had to choose, I'd rather do in like a pursuit for like, self-improvement.” How participants perceive the purpose of various psychedelics influences how they use them in recreational environments. Since participants view MDMA/MDA as a party drug, many of them use it in party settings, whereas many view psilocybin as a spiritual drug and may avoid it in particular recreational settings.

Ideas around the practice and intended use of psychedelics can change over time. In informal conversations, people explained how they often partied using psychedelics at music festivals in their 20s. After entering their 30s and their relationships with psychedelics changed, they used them only a few times a year and sometimes outside of festival settings with the intention of self-improvement. Wade supports this sentiment stating, “As I've gotten more experienced with them, I respect these substances a little bit more...So I wouldn't just take it

willy-nilly at this point as much as I did in the past.” While personal preference, social influences, and perceptions around psychedelics influence drug use practices, these perspectives and practices change over time.

Agentive Qualities of Drugs

Participants talk about ascribing agency to psychedelics. At the same time, a chemosocial and more-than-human approach considers how the agency of these substances comes from the matrix of intra-action between people, psychedelics, practice, and context. Analyzing these complex processes illuminates the relationships people have with psychedelics. For example, Daisy talks about mushrooms as living beings. She sees them as a source of knowledge, so she receives information and messages from them when she takes them. Blake conveys similar sentiments related to mushrooms. “I believe mushrooms, in particular, have some sentience, and maybe using them in that sense allows me to listen to myself more.” For Daisy and Blake, psychedelics are conscious entities, and consuming them provides valuable insight into oneself and the world. Drew explains how the living essence of psychedelics, in conjunction with other forces, provides specific experiences. “That is where life and the psychedelics themselves wanted to give me the experience – at the music festival.”

Additionally, in an informal conversation, an informant equated adverse effects from a psychedelic with having a negative relationship with the spirit of the drug. For example, when referring to MDMA, she said, “She doesn’t like me” because of throwing up every time she takes it. In another instance, someone mentioned, “I’m leaving Lucy [LSD] at home because she’s a cunt” referring to a previous challenging experience that this person wanted to avoid having again. People ascribe agentive qualities to these substances by naming them and aligning them

with desirable and undesirable characteristics, similar to what someone may do with a person or a car. In some cases, it influences their purpose for taking them, like gaining knowledge, and in other instances, it is to avoid taking them to prevent adverse effects.

To address whether psychedelics inherently have agency or do people ascribe agency to them, I argue the answer is both. Psychedelics inherently have agency in a material sense, in the way they have a material effect on the body. However, I would also argue that people ascribe agency to psychedelics, which is the cultural sense of agency. An example is the statement, “Molly doesn’t like me because she makes me throw up.” The first part of the statement, “Molly doesn’t like me,” accounts for the cultural ascription of agency to the Molly. The second part of the statement, “she makes me throw up,” accounts for the material agency or physiological effect of the Molly. Based on this, I would argue that psychedelics have agency in both a material and cultural sense.

If psychedelics have agency, it leads to the question of their ability to ascribe agency to other things, like humans and context. If we take seriously the concept of co-constitutive intra-action and Barad’s (2007) argument that the agency of the involved actors comes from the relationship with the other actors, then I would argue yes, psychedelics can ascribe agency to other actors, meaning humans and context. Each actor in the process gives agency to other actors, which suggests that psychedelics do provide agency to humans and context as humans and context provide agency to psychedelics.

Participants identify sensory changes in sight, sound, touch, taste, and smell, along with extra-sensory perceptions like physical and emotional sensations and time distortion. While the senses categorize these perceptual changes, they are not always mutually exclusive and merge

within experiences of synesthesia, visualization, and inter-dimensional experiences. These alterations to perception and senses also create experiences of connection on the individual, community, and universal levels. Participants often described these experiences as enjoyable, but there are times when psychedelic effects are overwhelming, especially when people feel sick or have unwanted visual effects. Decisions around drug use practices revolve around friend groups, personal preferences, and perspectives on the value and use of different psychedelics in different settings. Additionally, agentive qualities ascribed to drugs can define participants' relationships with specific drugs and their choices for taking them.

Set

The set is the mental state that influences someone's psychedelic experiences.

Participants discussed five critical components of the set within their psychedelic experiences: 1) preparation, expectations, and cultural beliefs, 2) intention, 3) trauma and turmoil, 4) mental health and mood going into the experience, and 5) spirituality.

Preparation, Expectations, and Cultural Beliefs

Many participants recognized that their information about psychedelics before their experience created certain expectations. These expectations varied based on where participants received information about psychedelics. Participants acquired knowledge in a variety of ways. Joe decided to educate himself before attending his first festival and taking MDMA. "I read up on that a little bit beforehand, just 'cause I wanted to know what I'm about to go through. All I knew was that it like makes you happy...and lets you release serotonin and stuff." Other participants learned from other people. The person Jillian purchased mushrooms from prepared

her for her experience. “She was just saying, like, make sure that the people that you're with are people that are your friends and you don't have any, like, previous insecurities, cause that could also amplify it. As well as, like, drink water.” In Henry’s experience, his friends piqued his interest in going to festivals because of the positive environment conducive to taking psychedelics. “Like I have friends that go completely sober, and they're like, ‘no, you, you literally will take the energy from this particular festival and take it home with you because it's that positive.’” Media sources also influenced participants’ expectations. Aidan cited Michael Pollan’s recently popular book on psychedelics, *How to Change Your Mind*, contributing to his understanding of psychedelics before taking them. Jillian also watched the Netflix documentary *Have a Good Trip*. She explained, “that was helpful to feel more comfortable about taking it [psychedelics] and feeling less guilty or anything bad... I'm a guilt-ridden person, sometimes, but, you know, understanding for me was the first part of like, getting ready to like, you know, try it was to take the negativity out of it for me.” In Kira's experience, media portrayals provided poor representations of psychedelic expectations and left her unprepared. “I've seen the movies where it's like the stereotypical acid trip, and things kind of look all wonky, but I didn't realize that it would be such a mental, emotional aspect of it. I thought it was just going to be - oh, things will look trippy and sound cool...So, I really didn't expect it to be as much as it was.” Cultural stigmatization around drug use can also promote negative impressions. Stigmatization filled Ruth’s first few psychedelic experiences with shame and fear for taking drugs. The indignity was so intense that she imagined seeing her family looking old and disappointed in her while feeling like she was being dishonest and inauthentic to herself. Outside influences from online information, media, and social stigmatization play a prominent role in establishing expectations for psychedelic experiences.

Intention

Colt speaks about intentions as manifestations and the ability of the mind to create opportunities for desired things. Intentions hold power in the same way that Colt speaks of manifestations. They are the purpose of a desired outcome from a psychedelic experience. In an informal conversation, someone mentioned that one of the problems with people taking psychedelics at music festivals is that they do not set intentions; they just take them. Despite this perspective, participants described a variety of intentions for taking psychedelics in this context. While Joe admitted to not having a set intention for self-improvement, he did intend to “use it for fun.” Isaac had a similar intention: “It was just kind of like, I knew it was fun to do.” Other intentions are also general, such as Drew’s intention to be open-minded, “I trusted the experience...It gives me what I need.” Intentions can also be specific to improving oneself. Henry is often seeking personal growth. “I’ll set the intention of like, ‘Hey, like I feel stuck. Um, I just don’t feel like who I am’ or maybe I want a little more introspective review on what I think I need for my happiness.” Helen sets intentions to better herself by meditating on her intentions to be a better person and help others. Isaac follows a similar pattern of self-growth in trying to help other people by asking a specific question:

“If I am walking down a path and then it splits, and I know for myself, like my truth, that left is the correct way and right will lead me down the path of pain and, and harm and will be, you know, much worse, what am I willing to do or what could I do in order to demonstrate and show and tell and force and like, make others believe that my- that the path that I go and pick is the right one? Like how could I get those people to follow the path that I tell them?”

In Floyd's case, he focuses on growth related to his specific condition. He has adult-onset epilepsy, where he has focal seizures. He does not lose time or the ability to perceive and understand his surroundings. However, he does lose the ability to speak for up to a minute. Before receiving brain surgery, he had upwards of 50 seizures a day. Now that he has a better understanding of his condition, he uses psychedelics to test and see what he can do with seizures during his psychedelic experiences.

Similar to Floyd's intention to address the caveats of his condition, other participants look for therapy and healing in their experiences. Jillian looked for an experience on MDMA and mushrooms "to let go of some of the stresses." She explained, "I was just feeling really down and out about a lot of different things. So I was really trying to let some of the things that I didn't need to worry about, just like, let it go." Furthermore, as Colt describes with manifestation, Jillian describes, "that intention really did help." Isabell uses psychedelics with the intention of a constructive coping mechanism. "I have a history of generalized anxiety disorder, depression, and alcoholism. For over a decade, I self-medicated with alcohol...I began experimenting more with psilocybin and MDMA starting in roughly 2017, primarily at music festivals and was finding a great benefit. It was like therapy to me." While some participants use psychedelics for fun, others set intentions for self-improvement and healing.

Some participants follow another path, setting intentions to have a spiritual or transformative experience. During informal conversations, many people at festivals mentioned the desire to have transformative experiences while at the event. One festivalgoer said he wanted a spiritual awakening but did not think he would, explaining that when he took his mushrooms, he thought of his intention but could not feel it or embody it and did not think it would happen. Again, this example speaks to Colt's idea of manifesting opportunities. Roman describes his

desire for a spiritual experience through the lens of unity. He hoped to experience unity because he viewed it as a way to process deep-rooted trauma. “I hoped to have some kind of, at least the experience of, of unity. They [the traumatic experiences] are all caused by me assuming that I'm this separate Roman-thing that exists separate from everything else. And when that dissolves, then all problems dissolve.” Participants describe intentions ranging from pleasure to self-growth, healing, and spiritual experiences.

Trauma and Turmoil

Another theme from the interviews was that many participants were experiencing turmoil in their lives. For some, it was deep-rooted or unresolved trauma; for others, it was facing transition periods in their life. For example, Henry explains deep-rooted trauma through his job, where he encounters “the worse humanity can probably ever demonstrate,” resulting in “stressful situations” he never “really dealt with.” Instead, he “tends to compartmentalize and push things away. And there's so much, um, that I didn't realize that really actually bothered me until I've had these experiences, and it's allowed me to cope with it more.” As a result, Henry faced his unrecognized trauma in his psychedelic experiences. Roman also describes unresolved turmoil from past romantic relationships that contributed to shaping his psychedelic experience:

“I had a couple relationships over the last couple of years, too... My ex-fiancé, uh, up and left out of nowhere...we moved to America together...We were together for nine years, and out of the blue...just called me one day when she was coming back to Tampa from [their country of origin] after going for a vacation... And then there were like two relationships after that too.”

The termination of these relationships was deeply emotional for Roman, so much so that he had to address them in his experience.

Participants also provided many examples of how turmoil can also mean life transitions. Drew's transition was changing jobs and working to find his subsequent career. A survey participant described a similar life transition, "I entered the event heavy with concerns about the health of my marriage and had just been downsized from a \$150K year corporate job which would likely require uprooting my family and moving to another state." Working through drug addiction, mental health, and other life challenges is a familiar transition that other participants identified as contributing to their experience. Shortly after Kira graduated with her college degree, she found herself in a difficult transition while contemplating her life. She explained, "I really felt like I was at this kind of crossroads and, you know, I was dealing with all these addiction issues and all this mental health stuff and had no idea what I wanted to do with my life. And I honestly didn't really have plans to stay alive for a lot longer because I was just kind of done with everything." Another participant, Maria, found herself in a similar position struggling with abusing methamphetamine and Xanax and combating depression and eating disorders. Losing essential people in one's life is another challenging transition. Joe speaks to this when describing his breakup with a long-term girlfriend and how it made him rethink his priorities. "I was going through a breakup, so to speak, and it had been like four months since it was like completely over, and I was still stuck on it. I was really thinking like, you know, about love and stuff and about, uh, if anything really matters, stuff like that." A survey participant also talks about their boyfriend dying three months before her psychedelic experience and how it placed them in a vulnerable life transition. Isabell shared a similar story of loss. Her best friend, who was like a sister to her, died of cancer while she was at a music festival. "I woke up that Friday

morning in my tent [at the festival] to a text message from Tonya's boyfriend that she had passed away that morning at the nursing home...I felt like my heart had just been ripped out of my chest.” This loss created a deep connection with her friend later that night while on MDMA. The association gave her a feeling of peace that her friend was gone. While trauma, life transitions, and losing loved ones are painful realities, participants cite these experiences as instrumental in shaping their transformative experiences. These experiences are powerful because they make participants vulnerable while questioning their current realities and future directions. It provides an opportunity for self-exploration, growth, and meaning-making in their current, tumultuous, and vulnerable life circumstances within the psychedelic experience.

Mental Health and Mood

Mental health and mood combine with trauma and turmoil to shape psychedelic experiences. Some participants identify a history of mental health concerns, like “generalized anxiety disorder, depression, and alcoholism,” that play into their psychedelic experiences and lead them to therapeutic outcomes (Isabell). For example, Roman speaks to the long-term mental strains he endured that contributed to creating parts of his experience “Uh, but I'd say the last year or two, I have been through, uh, more anxiety and stress and, uh, difficult issues in my life from immigration things that were, uh, terrible, where I'd say I'm always worrying or thinking about something or reliving something or, you know, ruminating replaying it in my mind. Something like that.” Having omnipresent struggles with mental health profoundly impacts experiences, considering these feelings do not stop during psychedelic experiences. Instead, it is quite the opposite where they are enhanced, which explains some of Roman's challenging and emotional experiences on LSD.

On top of mental health, participants report how their mood and everyday emotions impacted their experiences. For example, Joe speaks to the confusion, pain, and stress surrounding feelings of love after experiencing a breakup. Emotions can also include feelings of love and support from friends before entering the experience. Establishing a supportive mindset with the community can help reduce stress around the experience and allow participants to feel comfortable having vulnerable and potentially challenging experiences. Prudence explained that having a close bond with the people surrounding you makes going into the experience easier. It made her feel unjudged and supported if she needed it. Maria shares similar sentiments saying feeling safe with her best friend was essential to her experience and not feeling like she would have an adverse experience. Even when the participant did not trip with their social group before the experience, pre-established relationships helped create a supportive environment. For example, Brooke was with her cousins for her experience. She never tripped with them but knew them her entire life, so she trusted them to support her if she needed them.

At the same time, meeting new friends before an experience can still create a positive mood going into the experience. For example, Isaac describes how welcoming his new friend group was. “And I remember the complete and utter openness to like total acceptance of who and whatever you were.... And like very, um, very in-depth listening, very, uh, very patient, um, just kind like...just people that were so interested to, uh, to learn and show respect of like a new perspective. Like very open.” Isaac met his new friends only hours before his experience with them, but this supportive social group was instrumental in creating a positive mindset for him.

While influential life experiences and mood seem categorizable, these two factors are not mutually exclusive. Emotions accompany life events, and together they contribute to psychedelic

experiences. Roman provides a descriptive example about a friend who took his own life. He identified this event as being instrumental to an LSD experience he had shortly after that:

“Eventually, you know, we broke the door down, and I went in, and I found him dead in his bed. And I suppose I've never really, you know - I felt like I processed it at the time. I was like, I'm not going to repress any of this stuff. I'm just going to feel it as it is. And I was not afraid to be emotional and, you know, and sad for months, you know, after finding him. Um, but I, I think there's probably, there was just more.”

During his experience, these emotions he believed he processed reared again, and his friend who accompanied him worked to help him through it. “She managed to, uh, get that out of me as well - that I, firstly, had not dealt with just the, the sorrow, I suppose, of losing him, but then also the guilt that I feel for not having intervened early in his life to prevent him from going there...And I feel tremendous amounts of guilt for that, but at the same time, logically understand that I'm not really culpable.” Looking at the context of how life events collide with conscious and unconscious emotions and feelings is essential to understanding the critical factors of the set that contributes to participants' psychedelic experiences.

Spirituality

Many participants discussed how their experiences alter their ideas and identities around religion and spirituality, which I will cover in the next chapter. Something important to recognize about spirituality within the context of the set is that one's spirituality changes between experiences, which reconfigures the spiritual mindset and influences subsequent psychedelic

experiences. There is a reiterative relationship between the outcomes of an experience and the factors that influence it. This section focuses on pre-established religious or spiritual frameworks that influence participant experiences. One way is in how participants establish their intention for an experience. For example, Roman aligns his religious identity with non-duality, which he defines as “the recognition that there's just one thing going on. There's just consciousness and only consciousness and everything else.” This framework feeds into developing his intention to be open to experiencing and achieving non-duality. He recognizes that his interest in non-duality may predispose him to have specific kinds of psychedelic experiences. Oscar presents a similar perspective stating his interest in spiritual teachings and how they impact him. “I've read a lot of Yogananda's work and a lot of spiritual teachings. And also, umm, the Law of One, which is the raw channelings. It all strongly connects with my experiences that I've had on ketamine.” As some people explained at a festival, spiritual or religious experiences can create supportive and positive psychedelic experiences. For example, one male grew up Catholic and attended Catholic school. Later in life, he became an atheist, but during an LSD experience, he “literally found God.” He attributes his early upbringing in the Catholic Church to his God experience. At the same time, religious frameworks can result in terrifying experiences, as Ruth conveyed. Her family raised her to be religious. During her experience, she described feeling like she was in hell and seeing demonic imagery in people's faces. These sensations and visualizations conjoined with being ashamed for taking psychedelics and what she identified as religious trauma, being told by the bible that if you are not a good person, you will go to hell. Later in her experience, a stranger helped her by sitting with her and comforting her. This supportive figure felt like a helping angelic-like figure. She recognizes that her religious background was essential to the religious symbology and expressions that emerged in her experience.

Another participant, Wade, describes how his shifting religious framework earlier in life influenced later psychedelic experiences. Like other participants, Wade's family was Catholic. "I fully believed in God and the Catholic God and just like the traditional sense. And it was important to me. I went to like Catholic school for a few years growing up. Even part of that, like one day out of every week, I think we went to church and did that kind of stuff. We had a religion class." Then someone exposed him to conflicting religious ideas. "When I found out that the dude didn't believe in God. That was, like, when I started to question everything a little bit more... Okay, well, there is no God, like, is there an afterlife? These kinds of things... Definitely, it was super beneficial because, in hindsight, like, it forced me to confront those things, like, you have to ask in any kind of belief system." This questioning later influenced his ability to overcome restrictions around religious frameworks and connect to a more spiritual experience with psychedelics. "After a few of those experiences, it felt like those barriers that exist within the physical world kind of melted down. And you're able to connect a little bit more with the spiritual realm." Wade's example shows how questioning religious frameworks before finding psychedelics can later influence experiences that reduce barriers to exploring spiritual ideas in an altered state of consciousness.

The five themes related to the set that emerged from participant interviews are preparation, expectations, and cultural beliefs, intention, trauma and turmoil, mental health and mood, and spirituality. Educational resources, social groups, media sources, and cultural perceptions serve as resources for participants to prepare for experiences and set expectations. Sometimes these tools help develop accurate representations, while other times, they are not. Most participants set an intention for their experience. Intentions ranged from broad, like having

fun or being open to the experience, to more specific, like working on self-improvement by establishing an intentional question to answer, addressing a personal ailment, or experiencing spiritual unity. The intersections between challenging life events, long-term mental health, and mood create unique contexts that participants identify as essential to shaping their meaningful experiences. Finally, spiritual and religious frameworks can be a foundation for determining psychedelic experiences. Emerging from these themes is an understanding of how external forces shape and influence mental frameworks and also how these mental frameworks merge to shape participant experiences. For example, information, popular media, and culture on drug experiences influence expectations of an experience. Also, participants' history with religious practices and upbringings shapes religious frameworks. In the same way, life experiences like death, addiction, and terminated relationships impact participant vulnerability. Additionally, these mindsets merge to influence participant experience. One example is how mental health and mood merge with trauma and turmoil. Struggling with mental health while carrying the weight of vulnerability and a questionable future come together, creating complex mental frameworks when going into a psychedelic experience. Another example is when expectations of an experience blend with the intention of an experience. Ultimately, the set involves complex relationships between outside forces that influence the convergence of mental frameworks that shape participants' psychedelic experiences.

Setting

The setting is the environment surrounding someone during their drug experience. Participants identified four critical elements of the setting in their interviews: 1) the festival environment, 2) the music, 3) the community, and 4) the vibe.

The Festival Environment

The festival environment is an all-encompassing phrase to capture many festival elements. Survey participants identified some of the essential elements of the festival environment as the “lights, people, vibes, energy, nature,” “color, lights, level of stimulation,” “the crowd, the music,” “laser show, big screens with trippy images, beautiful decorations, people in costumes, soap bubbles everywhere,” and “the festival grounds and the energy created from the people that go.” Some interview participants discussed the overall festival environment as an essential component of their experience. For example, Isabell attributes the outcomes of her experience to being at a music festival by stating, “the setting of the music festival is very important in itself. I wouldn't get the same benefit just doing it at home.” Another participant, Blake, speaks to how current music festivals have improved since the 1990s by recognizing that “a lot more people are creating those playgrounds.” Tracy expands on this concept of a playground while discussing how these events create different environments like lit-up areas and chill spots for people to venture through during their experience. Other participants speak about specific elements of the music festival, such as natural settings, clothing, and visual arts.

Festivals are often outdoors and situated within natural settings. Some participants mention specific environments or iconic locations as pertinent to creating their psychedelic experience, including the rainforest, Red Rocks, the Flatirons in Boulder, Colorado, the New Mexico Desert, and “in a southern Illinois forest above a giant cave where the music was happening, with a full moon and beautifully partly cloudy sky.” Sometimes nature simply provides a beautiful part of the environment; Jillian says, “the sunset was really nice...being outside feels just great.” Even the harsh elements of nature, like the “mud and rain,” are appreciated variables of nature at music festivals.

Festival fashion was another notable element of music festivals. Blake mentioned how festival fashion has changed over the decades:

“Colorful costumes are getting a whole lot more extravagant since the 70s and the 60s. It used to be just grandma's crazy blouse looked kind of wild. And you know, cowboy boots and big hats and stuff, and now people dress very elaborately, right? They will bring wardrobe changes to music festivals and be anything from a mermaid to a peacock to a goddess to a space cowboy, you know, and that adds to the visual appeal.”

Brooke supports this shift to more creative costumes explaining how her friend group planned their outfits around themes. “We tried to coordinate our outfits... On the first day, we did aliens. So, we all wore like crazy alien socks and little antennas and green. And we had like the blow-up aliens, and then the second day was black. So, we all wore black with like, um, crazy, uh pashminas. And then the third day was Rasta day, so we all dressed, um, in red, yellow, and green.” She also identifies how fashion initiates conversations between festivalgoers by explaining, “people were coming up to us because we had blow-up aliens and they were like telling us how cool we looked and how like cute we looked.” For some, festival fashion is about creativity; for others, it is about comfort. Jillian explains, “I was actually in some really nice shoes that were, like, really soft. And that was really, really nice. Because I know sometimes you could really go wrong with shoes sometimes. But I was feeling those shoes.” Festival fashion has changed over the decades to be more elaborate and creative while still having functionality and practicability, which is important to the festival experience.

Participants also talked about visual arts as an integral part of the festival environment, especially as it has advanced and become “woven into the landscape seamlessly.” When reflecting on changes to festivals over the decade, Blake notes, “There’s a lot more effort being put into festivals, integrating art, visual arts, in addition to music...that adds to the visual appeal.” Oscar describes an example of one of the innovative forms of integrated art at festivals:

“I came across this vendor, and it was a...sensory deprivation thing. They had cocoon hammocks set up underneath a pop-up that they had...It wasn't traditional sensory deprivation. They put headphones on you like noise-canceling headphones, and they put special glasses on you. And the glasses had LEDs around the frame that were all - they were set to a pattern that was, I guess, synchronized with- it was some kind of binaural beats that they had coming through the headphones. And the binaural beats matched with like with LED patterns going in the glasses.”

Blake describes that art and the festival environment have changed over the years at music festivals. Oscar describes one of those changes with his description of an interactive art experience. Participants identify the natural elements, like rainforests, iconic nature locations, and rain and mud, as critical components of music festivals that contribute to their experiences. Additionally, fashion and visual arts have changed over time, becoming more elaborate, creative, and integrated into the music festival environment.

The Music

Music is one of the main reasons why people attend music festivals, but what makes listening to music at a festival different than listening to the same music on a recording? Floyd reflects on how live music involves real-time production in the moment, making it a unique experience compared to recorded music. He described how the musicians in Odesza created music while “being in the now.” In his experience, he realized they were not making music to get to the end of the song. Instead, he describes how the musicians relished producing every note, beat, and sound throughout the performance. This experience created a special moment where he felt connected and present with the musicians. The power of live music comes from the process of musicians making music in the moment and its ability to transport the audience into a feeling of timelessness where “nothing before exists and nothing after exists.” They just exist in the now. For Floyd, recorded music does not recreate a sense of living in the present moment because it eliminates the ability to establish a connection between the musician and listener in real time.

Live music can also serve other purposes. For Francis, live music helped him through a challenging part of his psychedelic experience. He was waiting for the artist French Kiwi Juice (FKJ) to start playing but started feeling overwhelmed after taking LSD and MDMA. When he reached the point where he felt like he was going to freak out, the music started playing, which redirected his focus. It relieved him from his uncomfortable feelings. Floyd and Francis’ stories illuminate how live music and watching artists perform are impactful elements of the music festival setting.

Many participants discuss a particular facet of music as instrumental to their experiences: the messages artists convey to their audience through song lyrics and interactions with the

crowd. Many participants ascribe insightful and personal meaning to these messages, which can impact them. For example, Quinn describes how the Grateful Dead lyrics “Strangers stopping strangers just to shake their hand” was instrumental in helping him be more social and become a member of the Dead Head community. Drew also talks about how the words in a song were instrumental in his experience. For example, in the song “Overthinker” by Inzo, the DJ integrates a portion of an Alan Watts conversation about how overthinking creates anxiety which leads to the creation of our reality:

A person who thinks all the time
Has nothing to think about except thoughts
So, he loses touch with reality
And lives in a world of illusions

By thoughts, I mean specifically, chatter in the skull
Perpetual and compulsive repetition of words
Of reckoning and calculating
I'm not saying that thinking is bad
Like everything else, It's useful in moderation
A good servant, but a bad master

And all so-called civilized peoples
Have increasingly become crazy and self-destructive
Because, through excessive thinking
They have lost touch with reality
That's to say

We confuse signs
With the real world

Drew heard Inzo play this song at a festival and felt himself embody Alan Watts' words about not overthinking. While on the Ferris wheel with his long-term girlfriend, under the influence of psychedelics, and hearing this song, Drew expressed his feelings to his girlfriend. He told her he wanted to spend the rest of his life with her. Hearing the words of this song live created an impactful moment for Drew. He felt compelled to live in the moment and express his feelings for his girlfriend.

The messages artists share with the audience are impactful as well. For example, during Roman's challenging experience facing and processing copious amounts of emotions related to grief over the death of a friend and the multiple ended romantic relationships, he described a message the DJ aired over the speakers that resonated with his circumstances: "he's like 'remember why you came here. You know, this is the time to process this and this,' and just talking about love and empathy and guilt and understanding and forgiveness and, um, yeah, talking to everyone. Like, 'I know why you came here...because this is why we are all here. To process this kind of stuff.'" This message deeply resonated with him as it gave him verification that he was in the right place to have his experience at the time. Isaac conveys his appreciation for how one DJ shared a message related to freedom of expression, saying, "like that DJ is kind of a genius for the way in which he continued to support and build this world of like don't be afraid to like, join the world. Don't be afraid to be yourself, to express yourself." Some participants value live music for its ability to create a mindfulness presence, and others see the value of live music in assisting them through challenging parts of their experiences.

Additionally, the messages contained within lyrics and those shared by musicians with the audience help justify and embody people's psychedelic experiences.

The Community Setting

One of the most significant pieces that emerge from the music festival setting is the essential role of the social setting and a supportive community during psychedelic experiences. Wade expresses, "part of the experience is just doing it with other people. Whether or not they'd be friends or strangers that turned into friends." This quote highlights the social nature of psychedelic use at music festivals. A survey participant mirrors this argument by identifying "my friends" as a top factor influencing their transformative experience. Additionally, the idea of a psychedelic community contains deep social connections that one survey participant describes as a "connection to a festival family." Participants exemplify these deeper connections through discussions on how the community provides a safe and friendly environment to trip in, how they view themselves helping others through experiences, and examples of being supported by friends and strangers during psychedelic experiences.

Participants felt the social environment at music festivals provided safe spaces to engage in recreational psychedelic use. As Wade describes, "the environment that is cultivated is very welcoming, very loving, and as a result, like you know, just caring and concern for anybody who's not doing too well... I would say people check on each other, and I've seen people not doing too well. I've not done too well at times as well." This quote relays how people feel safe because they know others in the community, and their friends will ensure they are okay and support them if they need it. A survey participant explains feeling comfortable during their

experience because of who they were with by stating, “The person I was with allowed me to feel completely safe and [gave me] permission to completely be myself.”

Everyone plays a role in creating a supportive social environment for people to trip at music festivals. When asked how participants would respond to a friend or someone needing support during an experience, many expressed doing what they could to help. For example, Blake stated, “If I have a friend that's wanting to experience something, wanting to explore something, I like to be there for them, and help them through that... Be the ear for their inner voice coming out, or be an anchor or safety in what can seem like chaos.” This sentiment shows that participants want to sit with others and be the support they need. They understand that sometimes support is needed because an experience can be overwhelming or chaotic. Wade describes how he would assist a friend having a hard time during a festival by explaining:

“Definitely bringing them away from any kind of isolation...even if that means primarily just sitting with them...hugging and just talking about things or maybe just being silently there to give them company...I reckon if I can sense the opportunity to maybe, like, just encourage them to get back into the crowd, and like, with our group, if we're with one, maybe try to do that, or just being respectful also of what they want to do. Like, [they say] ‘I don't really want to talk right now just, you know, want to be alone’...but like maybe keeping an eye on them.”

Wade’s plan of action speaks to meeting people where they are. In some cases, that means rejoining friends, and in other cases, that means being alone. Aidan provides an example of when he helped his roommate, who was working through a challenging moment during a festival. His roommate started crying because he realized he was putting significant energy into a friendship

with another person, and the other person did not reciprocate the desire for companionship. He recognized he needed to end the friendship, which was upsetting. Aidan sat with his roommate, talked to him, and offered snacks to comfort him during his experience. Like Wade suggested, Aidan sat with his roommate and provided him with whatever support he needed.

Many participants provided examples of how the community supported them during their experiences. For Isaac, his friends offered validation for his feelings and his realizations:

“I'm like just basically pouring out to Clint and Nick kind of all of the things that I'm- all of the connections that I'm making in my head, while they're sitting there listening with me and talking with me and kind of, uh, affirming all of the things that I'm saying in a, in a supportive way, but also like adding to, and, and being like, ‘Yeah, you know, Isaac, that's, that's such a great point. Like, I'm so glad you bring that up because, you know, it also ties into this and like how we can do and be this way for people.’... And so that was really wonderful to, like, feel that recognition from them. Like it was complete understanding and love and, uh, like openness to basically all of the good that, that I felt like I was, I was kind of preaching at the time.”

Isaac's friends helped affirm his experience by listening to him.

In Roman's experience, his friend, Emily, was instrumental in helping him work through challenging emotions during his experience:

“She starts talking me through it, and she had said, you know, ‘just put your hands in the dirt and just let, let it go. Just let the energy flow through you. If it comes up and bothers

you, just push it into the ground. Just let it go.’ I don’t know, she just like, kind of came up with it on the spot, I think...but the need was so dire that I can't really explain just how badly I needed exactly what, what Emily did for me at that moment. It felt like I was, uh, like I was gonna die. Like my soul was being ripped apart, and everything that she did was so poignant and so perfect...But, uh, yeah, the fact that she could have lived up to the expectation that I had at that moment, having never done this, it's not like she was an expert at this or whatever. Um, the fact that she was able to do that, uh, meant an incredible amount to me. And she managed to find a lot of the things that were, that were plaguing me. Um, guilt and remorse and sorrow and stuff...And at that moment, when she pulled that out of me at the music festival allowed me to kind of reconcile those two things, and I felt, um, a lot better about it. Um, as well as a lot of other realizations about things I'd been dealing with.”

Isaac provides another example of how a friend, Casey, said the right thing that allowed him to conjure and express deep-rooted emotions:

“And at this point, uh, Casey had kind of morphed into this, like... this motherly nurturing, uh, presence for us at the time...And so, Casey was being very, very patient with both of us and just sitting there and talking with both of us and answering, you know, any of the questions we had...Casey kind of like placing her hand on me and, and reminding me like, ‘Hey Isaac, I want you to know that it's also okay for you to release any of the emotions that you feel like you have been blocking for the amount of time that you've been in the military.’ And she just kind of reminded me that it was okay to-

whatever emotions I was feeling to let it out...I kind of laid on my back, and I started breathing and just like, um, like feeling very deeply. And I just, I had this rush of emotion and...I was just crying and pouring out, like a lot of...the parts of life that I had kind of been bottling up that were frustrating or aggravating or sad. So, I was just like letting out all this emotion through my tears and- which felt like, oh, I, my whole face was almost, um, like tingly with how good it felt...And, and it was just, uh, it was just wonderful to let those emotions out and to be like, allowed to like publicly like do that in front of others that were also like- that I knew were there for me and making no judgments.”

Isaac’s example exemplifies the theme of being around people that provide a safe environment to express oneself and be free of judgment.

While Joe was facing the feelings attached to a romantic breakup during his trip, the advice his friends gave him improved his mood during the experience:

“I got advice in like a few different ways. It's either, like, them telling me it's going to be okay. But the, the support itself, it goes a little deeper when, you know, like, when you know how they feel about you. Cause like they could say anything, and I would take it as, as it's intended. Like they don't have to say many words. They can tell me, like, you know, you can do better or, you know, it's not the end of the world and stuff like that. Um, but, ultimately, it was just them trying to cheer me up for the most part that actually cheered me up and not just like, not just what they said, it was like their intent behind it.”

Joe's friends supported him in his experience by making him feel better. At the same time, he talks about still working through some of the feelings he experienced internally after gaining positive reinforcement from his social group. This example speaks to what one survey participant explains as "surrounded by friends, yet in my own world." The community can be present and supportive, but there are parts of an experience that people still endure within themselves. Still, the extra external support from friends assists with that internal process.

Sometimes social support comes from strangers in the community. Someone on a social media post expressed gratitude for the gifts strangers gave:

"Just wanted to shout out to the people at the Papadosio set sitting in the middle of the crowd by the trees. It was about 15 minutes after Sebastian Paul got off stage, and my mushrooms started to kick in really hard with no music playing. Earlier, security had taken all my joints, so I had no way to relax from this intense come up. This girl came over and dropped off a bunch of minions, animals, and other small toys that made me laugh & kept my trip going in the right direction until Papadosio started playing. I ended up hiding them in the tree & loved watching other people's reactions to finding them. It's the little things that can make such a difference in someone's day. Thank you so much wherever you are <3."

Presumably, the strangers did not know this person was coming up on mushrooms and having a hard time. The author recognizes that this act of gift giving was pertinent to creating a positive experience. The author also passed on the gift for others to enjoy by hiding the toys in the trees.

Sebastian gives another example of how strangers can assist others on their trip. He was 15 years old at a festival, excited to see Phish, and he took four hits of LSD and an eighth of mushrooms. He was standing in front of the stage when Phish started playing:

“And you know, people start dancing. People are cheering, and it's like starting to freak me out a little bit, right. So, I can't find my friends. I don't know what's going on. I just stopped, and I just lay down on the grass. And I'm like praying for it to stop for a moment. And now, granted, I'm a kid, right? So, I'm a kid curled up in a ball in the middle of a concert ground out in the Everglades. And this couple comes up to me. And they asked me if I was okay. And I was like, 'not really.' And I told them what I did. And they were like, 'Oh, shit.' So, they fucking sat down with me. And they basically were just talking to me, like, just kind of holding me and helping me out for a little bit. And then they got me up. And they were telling me, 'Let's, you know, get it out. Just go with it. Dance all right.' And that's exactly what I did...But it was like, I just I realized that, you know, I couldn't fight it. And the more I fought it, the more it was freaking me out. And the more I thought, the more I just wasn't letting it happen.”

The way the couple supported Sebastian during his experience resembles how Wade describes how he would help someone. The couple recognized he needed support, sat with him, talked to him, and encouraged him to get up and join the crowd.

In some cases, not having a supportive community can be detrimental to an experience. For example, Prudence did not have a friend group at a festival. While tripping on psilocybin, she was walking around the festival. At one point, some people around her made her feel

uncomfortable and untrustworthy. As this feeling grew, she started seeing people from her past in other people's faces, which made her feel more uncomfortable. She felt like she was facing trauma from her childhood. Unfortunately, no one from the community came to her aid, and she did not have friends to turn to for help. A survey participant shared that they lost their friends during a festival and ended up alone at their campsite, contributing to their experience. In these two cases, these individuals did not have a support network to rely on to help them during their experience. This situation does not mean that the experience was not transformative, but it does present an opposing scenario to having a supportive group present. Overall, participants speak to the essential role of the community and social networks in assisting them in their experiences. This support can come from friends or strangers. In some cases, they provide reassurance and validity of their experience; in others, they walk them through overwhelming emotions.

The Vibe

A theme emanating from music festivals is the idea of the "vibe." So what is the music festival vibe? No one defines what this term means, but through conversations and discussion, participants reveal it is a kind of energy that comes from the social collective of love, positivity, and acceptance that exists at music festivals and is a rarity in the real world. Participants describe "vibe" as a combination of different expressions. For example, Helen discusses how the music festival is a unique environment that provides comfort to explore thoughts and feelings and to feel safe doing so, especially for those who otherwise feel anxious. The concept of safety to explore thoughts and feelings aligns with participants who talk about feelings of acceptance in this environment. For instance, Kira describes, "it was just this like overwhelming sense of love and acceptance. I think it was a big part of it. It was just the fact that I was surrounded by all of

this acceptance. And everyone said, you know, ‘In this moment, you're free to be who you are.’” A festivalgoer shared similar sentiments on a social media posting, stating, “the vibe and love I get from the space created by the whole team is something I cherish deeply... You all created this environment for not only me but countless others that need an escape and a place to let their freak flag fly.” Brooke provides an example of what this looks like at a music festival by explaining, “acceptedness of everybody, like people, would just walk up and just sit down with us and just start talking to us. And they're like asking us how our night was. And that was what really like brought us to being like; everybody's so nice. Everybody's so wonderful, um, and happy.”

Love is another expression participants use that describes the energy of festivals. Henry speaks to acceptance while describing love as an element of the music festival:

“The fact that you can almost feel energy radiating between people and, um, biases amongst race, gender, you name it, were just gone. And all you really felt for people was, uh, pure love. With that being said, it was really nice to be able to just walk up to somebody, and they would just say, ‘Hey, like your hat’ or ‘sick wardrobe.’ Um, and it was insane that it was more of like a collective whole of understanding that people were more love focused than anything else.”

Positivity is also part of the vibe. Henry describes, “It was amazing to gather so many people in such a large venue that were all pretty cool with each other, you know. There's no fights. There's no, you know, bullying. There's no...it's just good vibes” Lydia expands on positivity by explaining that people are happy and have overall positive rhetoric and are there to help each

other. The idea of helping people is evidenced throughout the community in the social support people provide and experience while on psychedelics. The elements of safety, acceptance, love, and positivity merge to create the vibe of festivals. Roman pulls all of these notions into one by explaining, “peace, love, happiness kind of thing, and everyone's on that same kind of wavelength and, you know, just walking by people, um, you know, very generous with giving things away and complimenting people, you know, the way they look and stuff... Like Emily went in there - she said her goal is to tell as many girls as possible that they are beautiful...I think a lot of people went there for that reason.” This quote emanates the supportive, loving, caring environment nurtured within the festival environment. Brooke provides an example of how the vibe permeates the culture and how others reciprocate it:

“I was in the middle of the crowd with my cousin, and we are just dancing, and I tapped this girl on the shoulder, and I told her that she looked beautiful. And then she asked me my favorite color, and I told her it was green. And then she was like, ‘okay, hold on.’ And then she turns around, and then two minutes later, she turns back around, and she hands me these like handmade earrings that were green, and she was like, ‘here you go,’ and it was just like crazy to me that people just like put this stuff together for other people, for the point of making them happy...it made my entire trip.”

The uniqueness of the festival environment's vibe makes people want to go to festivals to find it. The vibe, as this collective merging of love, peace, happiness, support, and acceptance, does not exist in the everyday world. Many participants convey this to be one of the critical components of what makes festivals special. Roman describes that “the environment feels

different to everyday life.” Experiencing the vibe is impactful for people. As one survey participant explains, “Music festival events have a specific way of life while attending these events. Everyone feels connected and a part of a larger community than they do within daily life in society. Being around that energy opens your mind to a new perspective on life.” Brooke experienced this new perspective when seeing how happy everyone is at festivals and thinking, “this is what we should be like all the time...kind to everyone and nice.” Henry brings together the elements of vibe and its comparison to the outside world. “It's amazing to see how, regardless of who you interact with, everyone's kind, they're loving, and they're willing to help you, even if they don't even know you. Which in modern-day society doesn't necessarily tend to blend, um, very often.” In some ways, festivals form a ritual space separated from mundane everyday life. Engaging in the different aspects of the festival, like music, sociability, and psychedelic states, generate a ritualized social cohesion (the vibe) similar to how Collins (2005) describes interaction ritual chains.

Participants discuss the context of the music festival setting in terms of the physical environment, the music, the community setting, and the vibe. They recognize connections to nature, enhanced creative fashion, and deeply integrated visual arts as essential to their experiences. The production of live music places participants in positions of mindfulness, while the lyrics and messages shared by artists instill deep meaning into participants' experiences. The community establishes a supportive care network through friends and strangers that reassures and validates people of their experiences and guides them through challenging moments and feelings. Finally, the vibe is an all-encompassing energy carried within the collective community

composed of peace, love, happiness, support, safety, positivity, and acceptance not found in everyday life.

Summary

The three contextual pieces discussed by participants concerning their transformative psychedelic experiences at music festivals are drug, set, and setting. Participants describe many sensory changes resulting from psychedelic use that bridge across all the types of reported psychedelics. They also experience other types of physical and emotional perceptual changes along with experiences of time distortion. Although participants describe these sensorial changes through the five senses, blending these perceptual changes is common, resulting in synesthesia (seeing sound), visualizing oneself in the future, and traveling through other worlds and dimensions. While these experiences are sometimes pleasant, some participants reveal the potential for challenging and overwhelming experiences. Along with these conversations on embodied drug experiences, participants convey the role of their friends and the value and agentive qualities they ascribe to psychedelics in shaping their drug use practices.

Where and how participants learn about psychedelics influences their knowledge of them and determines their expectations for an experience. Accurate portrayals of psychedelic experiences can prepare participants, while inaccurate information can lead them to unanticipated effects. This knowledge can also shape participants' intentions going into an experience, whether for fun, self-exploration, therapy, or healing. These intentions may function as a form of Moerman and Jonas' (2002) meaning response. Participants ascribe a purpose or a meaning to their experience by taking a psychedelic with a specific intention. In a sense, they have faith that the experience they intend to have will happen.

Past traumas, difficult life circumstances, and mental disposition going into an experience intersect with intentions and expectations to shape participant experiences. These entanglements start to hint at the processes that take place to create transformation and change for participants. Biehl and Locke (2017) cover a series of case studies that examine how people become through traumatic experiences. While psychedelic experiences are not necessarily traumatic, some people face and work through trauma, such as romantic breakups, identity and mental health crises, and death. In conjunction with participants' mental states and emotions, their pre-established spiritual and religious frameworks influence how they perceive their experience. In some instances, these frameworks can be supportive in deepening and enriching spiritual connections within experiences. In other cases, they may arouse doubtful, shameful, or judgmental perceptions of oneself and the experience.

Participants reveal how the environment is instrumental to their experiences. Many elements converge to assemble the “playground” that is the music festival. Some participants discussed the all-encompassing festival environment as a component of their experience, while others focused on the themes of nature, fashion, and art. Another critical element of the setting is the music. Specifically, participants identify the importance of messages and lyrics that DJs and musicians use during their performances that deeply resonate and create embodied meaning in psychedelic experiences. Additionally, participants recognize the fundamental component of live music in the festival experience and its ability to transport the audience into rare moments of being present. Like my observations in chapter 5, participant descriptions of these crafted spaces outside of everyday life align with the dreamworlds Kyriakopoulos (2021) discusses at psytrance festivals. Additionally, participants highlight the importance of music in their experiences, which

resonates with Kyriakopoulos' (2021) emphasis on the role of music in establishing patterns in liminal spaces.

Participants also identify the community setting as a core element of the psychedelic music festival experience. Supportive social groups provide unconditional support, validation, and guidance through psychedelic experiences in ways individuals need them the most. At the same time, the lack of a supportive social group can make psychedelic experiences more challenging or uncomfortable. Social groups are also part of decision-making processes regarding what drugs to take, dosage, and harm reduction practices. These dynamics speak to the social environment at music festivals in supporting or inhibiting psychedelic experiences and serve as an example of different chemosocialities resulting from people taking psychedelics in these settings.

The vibe manifested within music festival communities contributes to how the community displays compassion and empathy to support others in their journeys. The vibe is not a tangible part of the setting but a multi-variable, community-based energy that participants describe as unique to music festivals. It culminates peace, love, support, safety, positivity, and acceptance. These collective elements of the larger community enact Turner's (1969) *communitas*. This *Communitas* exists within social groups and events and expands across multiple events to encompass a larger music festival community. Part of the appeal of music festivals, driving people to attend numerous events in a lifetime, is to disconnect from the confines of the everyday world and become immersed in this transformational communal vibrational energy.

This chapter focuses on each of these contextual elements of the music festival independently, but ultimately, they converge in complex and dynamic forms. Chapter 9 dives

into a discussion on the cross-cutting themes of these elements. The next chapter investigates participant experiences to understand their transformational nature.

CHAPTER 8:

TRANSFORMATIVE EXPERIENCES

Introduction

The previous chapter covers the context of transformative psychedelic experiences at music festivals. One of the central questions of this research is determining what a transformative psychedelic experience is and what makes them unique from other psychedelic experiences. What differentiates an experience with significant meaning and importance from a typical psychedelic experience? This chapter explores this question to understand and define transformative. Since defining transformative is an exploratory part of the study, I did not define transformative for participants. Instead, I provided them the power and agency to determine if their experiences were transformative and how.

The first section directly addresses the central question by presenting participant definitions of transformative and examples to describe the two main components: thought and action. The second section presents participant narratives describing experiences and outcomes to demonstrate how thoughts and actions merge to create transformational impacts. These stories also display the various beneficial effects of transformative psychedelic experiences. Finally, the third section dives into integration as a robust process for making meaning out of psychedelic experiences. It serves as the key to producing transformative experiences for participants by bridging thoughts, reflections, and actions. The framework participants create to determine transformative experiences interestingly shares parallels with Brouwer and Carhart-Harris'

(2021) work on understanding transformation through pivotal mental states (PiMS), including changes in the internal patterns of self-narratives and forms of integration in making meaning out of experiences.

Like the previous qualitative chapter, the data presented in this chapter stems from participant interviews. The data comes from transcribed interviews and interview notes. I deliver these data through direct quotes and interview summaries. I identify participant quotes using pseudonyms for each participant. I provide additional context to the participants' identities or backgrounds when necessary. Some open-ended response data from the survey provides supplementary support to the interview data. Some open-ended response data from the survey supports the interview data, but I note these instances throughout the text.

Defining Transformative Psychedelic Experiences

This study did not ask participants to define transformative psychedelic experiences. Instead, I was interested in collecting narratives of such experiences to illustrate a colorful and diverse canvas of the potential for psychedelic transformation. First, two individuals provide base definitions useful for framing ideas around transformation from participant experiences. One individual shared their description of transformative psychedelic experiences to a social media post after seeing my research flyer, replying, “the definition of transformative is something, such as a lesson or experience, that inspires change or causes a shift in viewpoint.” A research participant, Quinn, presented a similar definition aligned with the idea of making changes to thought processes that are then applied and embedded in everyday life. One common thread between these definitions is that transformative experiences involve a shift in someone’s thought process that results in a tangible change in their everyday life. This concept of shifting

thought patterns resonates with Brouwer and Carharat-Harris' (2021) definition of psychological transformations as changes in “perception, cognition and action or behavior” (139).

An interesting caveat to the participants' definitions is that transformative relies on a change in everyday life, meaning someone can have a psychedelic experience that incites thought patterns. Still, it is not transformative unless they take action related to those thought patterns. Additionally, thought patterns are one of many shifts that can occur from a transformative experience, such as emotions or feelings. Ultimately, I identify two critical components of these experiences: 1) shifted internal patterns, like thoughts, feelings, and emotions, and 2) action or change in everyday life. Participants speak to each of these pieces independently when discussing their experiences.

Some participants discussed changes in thought patterns as internal self-contemplation. In Isaac's experience, he recognized how he constrained his ability for self-growth, stating, “In that like, moment of...alignment...I felt...the, the hand of, of whatever, you know, like source or God...It, it felt like, like a, a palm, like hit me on the forehead and just was, and just kind of showed me all of these, these truths in one moment. And some of those truths were...were very-like as simple as...you know, that you want to be a certain way and you're not allowing yourself to be that way.” Additionally, he re-evaluated his positionality within humanity. He explained being trained as specialized infantry or reconnaissance in the military to “find and destroy the enemy, or whoever we're told is our enemy.” During his experience, he envisioned himself eyeing up his enemy down the barrel of his rifle in his targets. He sees himself as the enemy. At this moment, he realizes he could have been born and raised in a different life, resulting in him being his own enemy. This vision shifted his perception of himself in the world. “So that vision really helped me, uh, comprehend the, the idea that I'm not so different from, from even, let's

say, my enemy that I'm trained to, like, seek out and destroy. And, of course, if I'm not that much different from my enemy, then I'm not different from anyone on this Earth, you know." Isaac experienced a shifting thought process which guided him to answer a specific question he posed at the beginning of the trip. He questioned if someone is facing a decision and will choose the decision he believes to be wrong, what could he do to help them or save them from making the wrong decision? His response combines an understanding of new ways of viewing the world, stating:

"You cannot change anybody else, and you can't - there's nothing you can do to change anybody else's answer. If, if you, if you hope to have influence, you walk that path with that person while maintaining your own strength and wisdom and sensibility and love and support...I realized that there is absolutely nothing that you could ever do or say that could change what somebody else does...except for leading by example."

Isaac's example reiterates how people can experience multiple changes in thought processes during an experience that relates to their position in the world and how they view others.

Other participants had thoughts that directly related to their everyday life. For example, one survey participant stated that their experience showed them, "I need to make my day-to-day life fulfilling enough that I don't need to escape it." The participant does not expand on what "escape" means. It may relate to unhealthy or unproductive behaviors that allow them to remove themselves from the undesirable things in life. Another survey participant also discusses escaping the day-to-day but in a different context. They write, "Made me realize that it is necessary to escape from the day-to-day, busy pattern of everyday life. That it's okay to dip your

toes in some other world. That world being a world away from your everyday commute, everyday tasks, everyday stresses. To be around people who are on the same level as you and for the same purpose of taking a break.” This participant conveys that their experience supported participating in activities that allow them to step out of the everyday world and break free from repetitive patterns in life. These experiences show how people can receive similar messages with different meanings based on the interpretation and positionality of the person receiving the message.

Participants also discuss how altered patterns relate to issues outside themselves, such as family or environmental relationships. For example, one survey participant’s experience revealed that “the insight I had about my relationship with my dad and the consequent challenge for growth in that sector of my life” was essential to making her trip transformative. Another participant re-evaluated the relationship between humans and the planet, explaining that their experience “made me realize even more how much damage has been done to our planet. And how humanity needs to change.” These two narratives reveal how messages and thoughts that emerge from psychedelic experiences can become externalized to other relationships outside of oneself.

Participants also speak to the second characteristic of transformative psychedelic experiences, actions, or changes in everyday life. Generally, two of the most common changes participants described related to physical health and mental health or emotions. For physical health, Maria details her changes to daily health routines, including meditation and stretching, eating healthier, and putting herself first when making choices. Other participants spoke about the changes they made in their mental health. Prudence discussed learning to manage anxiety and not feeling overburdened by it every day. Another survey participant also speaks to gaining

emotional intelligence, stating, “It taught me to address my emotions rather than bottle them, probably making me a more productive member of society.” Being able to manage grief was another emotional outcome for some participants. For example, Tracy described how her experience made her feel more connected to everything. She continued to carry this feeling in her everyday life, which was crucial in her ability to process the death of her beloved cat because she still felt connected. Isabell describes a similar experience. While at a festival, she learned that her best friend had passed away from cancer. She had an experience making her feel closer to her friend despite her death. She explained how processing her friend’s death during the experience impacted her after she returned home from the festival. “A few days later, I returned home from the festival and was mentally okay - I was sad, of course, but felt like I could turn my phone back on and face communicating with everyone, deal with the situation at hand calmly and rationally.” This reaction was pertinent because she describes how she might otherwise have handled the grief: “I truly think if I had found out in a different, normal situation (aka, at home on a regular day) that I would have gone to drinking heavily, likely blacked out, and just further separated myself from friends and other people, and fall deep into a depression.” These examples show how psychedelic experiences can have impactful, tangible changes in how people take care of themselves physically and manage, work through, and overcome challenging emotional situations, especially grief.

Bridging Impactful Thoughts into Transformative Actions

In the participant definition of transformative, there are internal and external changes that define transformation. While it is possible to have shifts in thoughts, feelings, or emotions during an experience, the keystone of a transformative experience is the resulting everyday change. I

outlined what each of those components looks like separately. The power of how thoughts connect to actions in transformative experiences requires an examination of critical experiences supporting this relationship. Many of these experiences center around themes of change, including empathy, mental health, positive life philosophies, overcoming addiction, life and career purpose, and religious and spiritual transformations.

Empathy

The first theme is experiencing love and empathy and finding ways to share that with others. Jillian and Henry have experiences that speak to this change. Jillian explains how her experience shifted her thoughts, stating, “it kind of gave me a whole new perspective on the world,” which resulted in changes in her perspective of herself. This perspective included “treating all people a lot more compassionately and taking a step back from maybe my initial... what other people may think of me for doing anything...I don't need society's approval to love myself. I can love myself just as I am.” This new self-image impacted how she viewed others too, as she explained, “And, you know, that's transformed me to, I think, be a more positive, kinder person to other people...Even working my part-time job. If I'm, like...getting bitter or whatever, grouchy and taking that back, and like, really becoming patient with myself and others, you know...understanding myself that like. Yeah, I can feel these things. It's not invalid to feel these things. But it's also important to take a deep breath. It's really not that important.”

Henry's experience also changed his outlook on other people. He explained, “I'm somebody who's pretty open just in general, but even from that, it really made me look at, um, society much differently...it was finally the first time that I got to see a side of humanity, that

made me feel, that there was hope.” This hope opened a new way for Henry to understand and form relationships with the people he interacts with in his career:

“I don't become as angry with people as I have in the past. I'm definitely more empathetic to situations where, in the past, I, I certainly would not have been, um, helpful to people or at least generally understanding. And so, from that perspective in its own, right, definitely, um, was transformative because it changed my outlook on my career. And I, I stopped looking at things in terms of, well, you know, it - the stereotypes that I had previously created in my mind, I realized were not factual or no longer important. So, I feel that I've been able to provide better care to patients. I've been a better public servant, and, um, it's just allowed me to be a better human being.”

Jillian and Henry speak about how their experiences exposed them to empathy, which carried into their everyday work and lives. This change then impacts the people they work with and serve in their jobs. A survey participant also explains an instance of gaining empathy from an experience. Like Henry illuminates how his experience dissolved stereotypes for him, this survey participant stated, “I was able to get over my hate. For others and for myself. It was straight up the cure for my racist past.” Scarlet also found empathy, specifically for animals, which changed her relationship with them to the point that she stopped eating meat. These examples identify the shift to being more empathetic, which people express through more profound connections with self-image and perspectives of and relationships with others.

Mental Health

Another theme in transformative experiences was the impact on mental health. Many participants discussed experiencing depression and anxiety regularly. They also talked about how their psychedelic experiences helped them improve their mental health. Oscar and Jade provide examples of this transformation. Oscar experienced depression. During a psychedelic experience, he had realizations that resituated his perspective on the causes of his depression:

“Knowing that existence and life and consciousness goes beyond just our day-to-day personal experience, I think for me, that offers a lot of transformation. It gives a lot of power because the more that someone can integrate the objectivity of existence into their personal experience, the more you realize that you have more power over your life than you realize. I think for a lot of people day to day life, they feel all of these external forces playing such a large part in their lives...and probably most people live their lives, umm, thinking and feeling that the external forces are more...responsible for their life experiences...For me, the transformation has come in that...the individual and our internal abilities and power have much, much more responsibility for our daily and life experiences. And so in knowing that and integrating that, you have the ability to change your life to be what you want it to be, as opposed to letting it be defined for you.”

This change to Oscar’s thought process allowed for his transformational change in “pulling myself out of depression. Pulling myself out of disillusionment and making a life for myself that I; that I want. And in the last 10 years, I’ve had a lot less of those feelings of depression, disillusionment. I’ve crafted for myself a life that I; that I want to live.”

Jade also talks about how psychedelics have changed her perspective, impacting her view of her mental health. Something unique about Jade compared to other participants is that she has schizophrenia. Typically, professionals discourage people with family histories of such mental disorders from taking psychedelics because of concerns about the early onset of these conditions. However, Jade was already diagnosed with schizophrenia before trying psychedelics. Therefore, it did not contribute to the expression of her disorder. Instead, during her experiences with psilocybin, she discovered how they make her feel “more normal” because she knows the visual alterations to her perception are an effect of the drug. Therefore, she does not have to question if they are part of her reality or a symptom of schizophrenia. This experience encouraged her to take psilocybin therapeutically at home to continue working through various issues related to her schizophrenia and her relationship with her boyfriend.

Like Jade and Oscar, other participants report positive impacts on their mental health from transformative experiences. One survey participant describes, “Because of realizations I had during this experience, I was able to finally go into remission with borderline personality disorder and don’t fit the diagnostic criteria anymore. I was able to finally control destructive behaviors and put in the work to learn to cope with my quick and intense reactions.” Likewise, another survey participant explained, “Falling in love with festivals gave me a motivation to be a better person. It gave me something to look forward to while I’m feeling depressed as I struggle with bipolar disorder. It even gave me motivation to be healthier and start working out.” This example identifies a relationship between the inner and outer world, where the festival context maintains the relationship between the internal change with depression and bipolar disorder and what that means for outward transformation. While these examples do not touch on the detailed neural mechanisms that allow these changes to occur, they highlight the potential of psychedelics

to open opportunities for people to face and work through challenging mental health concerns and disorders. They also illuminate that there are contextual elements that support these relationships.

Positive Life Philosophies

Participants report how enlightening insights about themselves resulted in developing more positive personal philosophies. Roman, Quinn, and Floyd describe their experiences related to this theme. During Roman's experience, he reflected on his emotions and behaviors regarding others:

“I looked around at people and just got the sense that a lot of the things I think I have problems within my relationships with people... that I actually displayed those same behaviors. And I know for a fact that...I don't have the intent to be mean or derogatory in any way whatsoever. So when they are doing it, why am I behaving as though they don't have the right to behave that way and that they must have malintent with what they are doing when I do the same thing, and I know that I don't and that these are - it's projection, I suppose...that people say you project those things onto other people that you actually have problems within yourself.”

After the experience, Roman felt better but was still working through the thoughts and realizations the experience presented him:

“I felt while even though I was, I guess, confused to some extent and still processing those major things that had changed and, uh, recognizing certain flaws in myself that I need to correct. At least, it's the first step. It's not a problem that I was aware of before...It feels like it's given me confidence to address those things and work through them...I guess also the optimism. The profile of optimism/pessimism with these issues has changed...In general more optimism about being able to work through those issues...The awareness is big from two angles because I need to be aware first so that it's within my realm of, of knowledge and attention. Um, but then also the act of being aware to me, by definition, implies that that thing is not me because I could not be aware of something that's me. You have to be separate from something to observe it. So it's, it's got that meaning to me as well.”

Roman reflects on how he projects thoughts and feelings about himself onto others, and by recognizing it in the experience, he can continue to work on it afterward. In describing how he is separate from this behavior, he is speaking about letting go of his past behavior to rebuild new internal positive philosophies that influence his perspectives and relationships with others.

Quinn discusses how experiencing positivity and joy in his experience brightened his perspective on the world. Before taking psychedelics, he was socially aggressive, like starting fights with people. However, since his experience, he has been more appreciative, loving, and open-minded toward others. Much like Roman's experience, his internal reflection on unattractive personality traits during his experience influences how he chooses to interact with others and conduct himself after the experience. He also recognizes he still has other personal attributes he wishes to work on, like eating healthier and drinking less alcohol. Still, he sees the

potential for psychedelics to challenge his current mindset and assist him in making positive life changes.

Floyd has adult-onset epilepsy causing him to have focal seizures. He does not lose time and can perceive and understand his surroundings, but he does lose the ability to speak for up to a minute. Before receiving brain surgery, he had upwards of 50 seizures a day. Going through diagnosis, surgery, and therapy was a challenging and dark time in Floyd's life. After a transformative psychedelic experience at a festival, he found a new perspective on life. During his experience, he met someone with a full leg amputation and conversed with him about their different situations. He realized "there are worse things that happen to better people," which altered his depressed and negative life perspective to a more positive one. Now he has an appreciation for waking up every day and developed the "emotional fortitude to not be a victim even when you have every excuse to do so." Essentially his experience helped him realize that having adult-onset epilepsy is challenging and not ideal, but there are much worse things that he could be facing. Instead of being upset about it, he finds ways to stay positive, like developing simple phrases to express his attitude that stem from his experience. It reminds him to appreciate his life. These three stories display how participants' self-reflections and realizations about their attitudes, positionality, and personality traits can create positive changes in their life philosophies and practices.

Overcoming Addiction

Kira and Brooke exemplify experiences that show the potential for psychedelics to break habitual patterns of problematic drug use and addiction. Kira describes a psychedelic experience that planted a seed for her to recognize her problematic relationship with drugs:

“That was kind of the first moment where I had this realization that like, ‘Hey, I need to kind of do something about this drug problem.’ And like, for a couple more years, I had that thought, and I knew, like, I identify as an addict, and I know that I need help, but I’m just not ready yet. But that was like the moment that the seed was planted, and now I’ve got, I don’t know, I’m coming up on like four years clean or something, and I’ve actually done things with my life.”

A few years after the experience, Kira overdosed and ended up in the hospital. She finally faced her addiction, opened up to her parents, and asked for help:

“I got into like a 14-day state-run in-patient treatment center. It wasn’t fancy, and it wasn’t anything extravagant. It was like the bare minimum, but it was exactly what I needed. And I started going to the 12-step meetings, and I did everything they told me to do because I figured, you know, everything I’ve done to get to this point has not worked out for me, so maybe I should try listening to somebody else. So, I did like the sponsorship and working all of the 12 steps and everything... Then I had about three years clean.”

After getting clean, Kira took another step beyond leaving her drug addiction behind. She followed her dream and carved out a new path in life. “I went back to school to start working to become a substance abuse counselor. And I’m about to graduate...and I’m working as a behavioral health tech at a substance abuse treatment center right now. And everything has just; it’s really fallen into place. And like, you know, four years ago, I was ready to give up, and I didn’t want to live anymore. And I never ever imagined that I could be somewhere like this.”

Kira's story is nothing short of transformative. She went from lacking a purpose in life and being consumed by drug addiction to facing her problems and overcoming addiction, returning to school, and establishing a career to help others.

Brooke shares a similar experience to Kira's. While at a festival with her friends, Brook explains how they all reflected on the positivity around them and how happy they felt in the environment and started thinking, "If we just try to be as happy as we are [now] all the time, it'll open us up to all these possibilities and experiences and it'll just kind of get us on track to start following our dreams and completing our goals." At the same time, Brooke was addicted to cocaine. The experience made her realize that she needed to rethink her relationship with drugs to reach her goals. She acted on this insight by returning to school and working towards being an ultrasound technician. She still attends festivals and explains how her experience helps her avoid slipping back into problematic drug use. "I just thought back to my experience and remembered that I need to keep my head on straight if I want to get to where I want to be. And I need to not, like, fall back into those temptations." A survey participant shares similar sentiments about how transformative means overcoming past drug use, stating, "The fact that I don't drink alcohol anymore. I don't crave it either. And also that it made me think about my health more and thus moved me towards quitting smoking cigarettes as well." Participant experiences show how transformative experiences illicit powerful reflections on personal relationships to drugs and identify incentives for changing problematic relationships. For Kira, she recognized there was a problem, and she was unfulfilled in life. For Brooke, it was developing a future career, and for the survey participant, it was improving health.

Finding Life Purpose and Initiating Career Changes

Some transformative experiences enlighten participants about their true purpose in life and give them the confidence to pursue it. Helen, Drew, and Quinn provide examples of this outcome. During an experience, Helen received the message that her purpose in life is to help people. She enacted this by reflecting on her own life and deciding to help others heal from their traumas. She went back to school to study Psychology to build a career based on the transformative experience that directed and reinforced her on this path. Drew speaks about an experience that gave him a different meaning. Instead of the experience giving him life direction, it warned him about a possible decision he would make. At the time, Drew's social group was unsupportive of his life and career goal. The message warned him that this friend group was unproductive to achieving his life goals and guided him to find new friends. He also realized he needed to find a new place to live and something different to do with his life and career. After the experience, he moved to another state, started a new job, and reinforced his relationship with his girlfriend by deciding to spend the rest of his life with her.

While Helen decided to change her career path in formal education, some participants defined a new life purpose differently. Quinn admitted he did not do well in school. However, his transformative experience opened his eyes to creativity. He found himself curious about bringing art and music together, painting more, playing the drums, reading poetry, and engaging in other forms of creative self-expression. Diving into these art forms felt like he found a purpose in life without relying on formal education. This experience was so profound that he continues to practice art today in many ways and has multiple artistic and cultural elements tattooed on his body. A survey participant found a similar life passion in creative outlets from a transformative experience. They explain:

“That weekend inspired me to chase my dream of being a painter. I still work a 9-5 job in the medical field, but on the side, I travel and sell prints and tapestries of my original paintings. Since then, I have visited 15 states, sold artwork in 4 of them, sold over 150 tapestries, 500+ prints, met the love of my life, and seen 30+ shows, been to 14 festivals, and am the happiest I have ever been. The molly dissolved a fear deeply rooted within me with the help of the reggae music I heard that weekend. I was freed from myself.”

This description identifies that the experience shifted their thoughts from fear to freedom and created the opportunity to dive into creative self-expression, ultimately selling their art and finding a fulfilling purpose in life. These stories highlight the moments during transformative experiences that shift people’s perspective on their place and purpose in the world and provide a chance to make changes that allow for a more wholesome life, whether moving across the country, finding a new career, or sinking into creative practices.

Religious and Spiritual Transformations

Participants commonly related their experiences to religious and spiritual topics. Some participants' transformative moments resulted in dramatic shifts from previously established religious frameworks, while others reinforced their current religious practices. Many participants who moved away from organized religious practices previously identified as Christian or Catholic. For example, Jillian explains, “I was raised Christian, but I'm developing kind of my own ideas about my faith.” While Jillian’s religious identity fluctuates, she still “leans towards Christianity, but the psychedelic experiences helped me shift my belief to something I can completely understand and justify in my own voice.”

Isaac speaks of his religious changes in a similar way to Jillian. He explains how his family was Christian, and his grandfather traveled worldwide as a missionary spreading the word of God. “In religion and especially Christianity or, you know, like the, you know, the God and heaven and hell, you know, realms- There it’s like very black and white or at least the Bible tries to paint, you know, this is what you should do. This is what you shouldn't do.” Through his psychedelic experiences, he discovered a new perspective on these dichotomous ideas of good and bad or heaven and hell, “I feel like it's all gray, you know, it's all- Rather than black and white, it's all gray. It's all like of the same thing...it feels to me that psychedelics and spirituality helps remove the, like, the hard lines of religion. Like it's stripped all of that away. And what was left was like the golden rule.” Isaac still feels a sense of connection to his Christian upbringing stating:

“God is love and Jesus Christ, the story of him is a great parable, you know, like it's, it's a fantastic book because the main character is somebody who we should all strive to be like. And that's about as far as I go when it comes to Christianity anymore because I truly believe that in my own walk, the way that I treat and speak and see everyone around me is, is how, you know, Christ and God intended...I feel like...being Christlike is just being open and loving to anyone that you, you know, to anybody and being willing to like, share love to those, even though you've never met 'em and never talked to them, like you still have love for that person because, because you and that person are, are one in the same.”

At the same time, he bridges other religious and spiritual ideas to create a new spiritual practice in his life. “I’m very spiritual with the connections to like Buddha and Christ and Gandhi, like, you know, they’re great examples of like how you should try to practice and be... I try to meditate...I try to recycle. I think of my ecosystem. The betterment of, you know, like humanity basically...I try to feed myself better. I try to exercise...being active, reading, um, herbal medicines as well.” While Isaac left behind his rigorous religious background, he bridges some of the broader lessons of Christ with other spiritual practices in ways that created more productive behavioral habits like clean eating and exercising.

Wade also discusses how he moved away from Catholicism to accept a broader spiritual understanding that spans multiple formal religious frameworks. “I was raised Catholic, but umm...mostly due to these experiences, I’ve kind of gotten away from just any specific organized religion, I guess. But I recognize some similarities across the board between them. And I think that, ultimately, they’re all describing the same kinds of things, just with different words. I believe in something, but not necessarily...” Like Isaac, Wade’s story speaks to being raised within a formal religion, but psychedelic experiences guide him towards a more spiritual path. However, Wade’s narrative differs because he broadly discusses his spiritual beliefs, recognizing his beliefs in something but not identifying any specific form of it.

Maria provides more specificity in describing where her spirituality resides. Like many other participants, her family raised her to be Christian and believe in God. Eventually, she stopped going to church because she did not feel like she was getting any benefit from it. After taking psychedelics, her perspective changed, and she became more open-minded and questioned Christianity’s reality. Through her psychedelic experiences, she felt more connected to nature and other people. Her beliefs shifted toward connectedness with everyone, the Earth, the Universe,

and the Oneness between them. The Oneness provided grounding and calmness for her, which she did not find in Christianity. Prudence also found spirituality through an established relationship with nature. Her family practiced Catholicism and was somewhat religious. However, through psychedelic experiences, she found her way to Paganism and practices of worshipping the seasons, allowing her to feel in touch with the Earth, her soul, and her body in positive ways.

For Jillian, Isaac, Wade, Maria, and Prudence, psychedelic experiences presented a new perspective on religious and spiritual practices. It turned them away from Christianity and Catholicism to new ideas of connection to the Earth, each other, and some other divine source. Other participants describe how transformative psychedelic experiences reinforced their existing religious beliefs. A survey participant describes how an experience reawakened their relationship to Christianity. “I believe the energy patterns that I saw that night were The Holy Spirit revealing itself to me. It took a lot of time and reflection for me to realize that. But in the years since that trip, I've undergone a total spiritual awakening and have reconnected with my Christian faith, and I believe that this [psychedelic experience] was the start of that.” Aiden Yates also found reinforcement in his faith during his experience. In his hometown, he practiced Buddhism with Monks but never felt Buddhist. During his experience, he deeply considered his mindfulness practices and observed his thoughts, realizing he was Buddhist and wanting to continue diving into his practices more. While transformative moments can alter one’s perspective on religion and spirituality, they can also fortify them.

The psychedelic experience can illuminate thoughts and ideas about current religious frameworks or present new ones. Some participants speak to parts of the integration process as contributing to the change in spirituality they experienced afterward. For example, Florence talks

about how learning about her cultural roots after an experience shaped her ideas and practices around spirituality. Like many other participants, her family raised her to be Christian, but she no longer identifies as one. Her newfound spirituality changed her everyday life. She went from being consumed by anger towards her childhood trauma to showing and accepting love. Her spirituality evolved from learning about her African roots and African American spirituality. She felt her Christian background was grounded in white western beliefs, detached from her cultural heritage. Her newfound spirituality embodies ideas and practices from voodoo and the African American perspectives of “be here now” to create a spiritual theme of “love is my religion.” The impact of her experiences is so profound that she has tattoos reminding her of them. One features a female human figure with flowers sprouting out of its neck in place of a head, leaning against a mushroom with the text “here” inscribed below to remind her to “be here now.” Another tattoo is a heart with an embedded Ying Yang pattern and the West African phrase “áse” written next to it. The concept of “áse” is about recognizing the power to create change. These tattoos are permanent reminders of her experiences and the transformation and change they provided her.

Helen also discusses how spiritual and cultural influence impacted her shift in spirituality. She grew up in a Christian household but started questioning religion during her teenage years, potentially being an atheist. Integrating psychedelic experiences with meditation and spiritual books like Ram Dass’ *Be Here Now*, Helen’s relationship with spirituality changed along with her practice of psychedelics. Instead of going into a psychedelic experience with the intention to party or without any intention, she takes them with an intended purpose only once or twice a year, looking for healing and spiritual experiences. Interestingly, Florence changed her relationship and practice with psychedelics as her spirituality shifted. Before, she partied while taking psychedelics, having little to no intention or thought of using them. Now, she spiritually

uses them. She attributes her new relationship with psychedelics to keeping her from going down a path of opioid use and finding a calmer, peaceful, and spiritual direction in her life.

Transformation can mean many things for participants, from changes in their mental or physical health to developing more empathy for themselves or others, overcoming addiction, finding a new purpose in life, and shifting or reinforcing religious or spiritual frameworks. The critical parts of determining a transformative psychedelic experience are identifying the change in internal patterns from the experience and the resulting change in everyday life that occurs after the experience. Something common among many of the stories participants share is the practice of self-reflection, especially in realizing specific characteristics about themselves that they are unhappy with and desire to change and then enacting that change. For example, Roman figured out he projected his thoughts and feelings about himself onto others. Kira reflected on her problematic relationship with drugs. Drew recognized that the people he was spending time with were not productive and needed a change of pace in life. Helen questioned the meaning and role of religion in her life and found a new spiritual intention. Self-reflection during and after these experiences is essential to gaining insight from them. After the experience, true transformation requires additional processing to identify the necessary actions to make everyday changes. The transformation from these experiences is not explicitly natural or inherent in the psychedelic itself. The relationships between the inner self and the outward context and practices further assemble and maintain this transformation.

Processing Experiences: The Key to Transformation

If someone can have a new thought in their experience, but it does not result in a change, then it is essential to determine what makes transformative psychedelic experiences different from other thought-filled experiences. Some participants would argue that transformative experiences require processing the experience to extract the lesson from it and enable change from it. Prudence identifies that the transformative aspect of the experience occurs afterward in the process of reflection. Glenn aligns with this notion that processing the experience is essential to the transformative piece. He explains from his experience that “It required not only having the experience, but also a reflective process that happened after the show...It’s a constant kind of constructive process of, of making meaning out of what that was.” He further discusses how working through an experience is challenging because the experience is just that, it is an “experiential component that is not conceptual.” Processing requires conceptualizing an experiential thing, which can be contradictory and challenging. He describes how he worked through bridging the experiential with the conceptual “it was a feeling...but that had to be connected then, with a storytelling process, really, I think, that made it meaningful, and I would say transformative.”

Ultimately, transformation means taking a new thought, feeling, emotion, or lesson from experience, processing it through reflection, and then turning it into an action or everyday change. Wade describes what this process means to him, stating, “those lessons that you learn on psychedelics, those experiences are ultimately meant to be applied to your everyday life without necessarily having to have those substances there too... there's like, definitely lessons to be had, that I try to apply to my life as a whole.” Some people may call this overall process of bridging the parts (thoughts, reflection, action) integration, which looks different for everyone. For Helen,

integration involves journaling, meditation, breathwork, and chanting. Olivia shared her experience with her therapist, which helped her process it and heal past family trauma. As mentioned earlier, Glenn uses storytelling to work through the emotions and experiential aspects of the moment and pull out the conceptual lessons to learn from it. Although many participants did not identify storytelling as an integration method, many of them reflected on how sharing their experiences with me during their interviews was beneficial because it allowed them to learn new insights. Additionally, my process of asking them open-ended questions for clarity or probing different topics like community and spirituality provided opportunities to see new themes and ideas in their experience.

Informally sharing experiences with friends speaks to the power of the community in processing the experience. For example, Francis explained how his friends sat around every night of each festival and recapped their day and experiences. It was a way to learn about what others went through, learn from what happened, and create memories and conversations among friends. Drew also discussed how having family and friend support after the experience helped him integrate it. He felt comfortable being open and vulnerable about things with his friends, girlfriend, and his mom, who is a mental health professional. Floyd also depended on his family to process his experience. In the days following, he talked to his brother multiple times as a follow-up. He did not have any standard forms of integration, like creative outlets, but found that verbalizing his thoughts, feelings, and experiences to his brother was useful.

Examples of Integration: Bridging Thoughts, Reflection, Action

Example 1: Roman's Non-duality

I have included pieces of Roman's narrative throughout the qualitative chapters. His experience was full of turmoil. Plagued by the guilt of his friend's suicide, the ending of multiple romantic relationships, and self-reflections of projecting uncomfortable attributes about himself onto his friends, Roman faced a challenging, transformative psychedelic experience. His friend assisted him through it, supporting him in his time of need. He confronted the many emotions connected to his recent events and past traumas. During and after the experience, he took time to reflect on them, recognizing some of the unproductive patterns in his ways of thinking about everyday life. He explains his process of integrating these thoughts and reflections in an entanglement of his spiritual ideas of non-duality. "There's a, um, there's an intellectual understanding, and then there's an experiential understanding. Or like a living of that embodiment or that integration of this....So to me, integration and embodiment is about my everyday experience based on the foundation of that feeling of unity and oneness." Much like Glenn describes things as experiential and conceptual, Roman describes them as intellectual and experiential. To Roman, the intellectual is that of the conceptual. It is the thoughts the experience presents and the lessons he takes from it. The experiential is the action he creates from them. He further explains what the integration of his thoughts and reflections looks like for him:

"I have my routine doing meditation, um, every day, but it's reminders. So, I would like write on a sticky note - now I don't actually have to give myself a physical reminder anymore...Umm, I would have these negative thoughts, emotions go into the spiral of rumination and, you know, self-loathing, whatever. Um, and then I'll remind myself, 'uh,

Roman, remember, you are not, you are not those thoughts. You are not those feelings.’
Um, and then do that little mini meditation where I ask myself if I'm aware, where I'm
aware from, um, and just stay in that state of unknowing or observe those thoughts.”

Roman had an established meditation practice before the experience. After the experience, it provided him with a reiterative constructive process, allowing him to recognize and deconstruct negative thought processes in the same way he was able to during his psychedelic experience. By practicing these reiterative thoughts and reflections, he turned them into everyday practices leading to positive transformative change and reconfiguring his life philosophies.

Example 2: Isaac Embodies Fishermen

I have also shared descriptive parts of Isaac’s experience throughout the qualitative chapters. Going into his experience, he asked himself if someone must make a decision and they were going to choose the decision he wholeheartedly believed to be wrong, what could he do to help them or save them from making the wrong decision. During his experience, he realized the only thing he could do was walk the path with them until they realized for themselves the best decision. Additionally, during his experience, he saw himself through the targets of his rifle, enlightening him about the human connection he has to everyone. These are the changes in thoughts he experienced. After the experience, he used creative outlets to reflect and process what he learned from the lesson. He painted a picture, which he shared with me, and explained its meanings related to his experience. First, he explained how the colors he used to paint the people represented specific feelings:

“I drew like this fisherman in a boat and this person in the water. Like kind of, uh, kind of struggling to swim...I drew the fishermen, uh, he was all in green. And I chose red, uh, for the person that was kind of like drowning, um, or like, you know, struggling to swim. I remember feeling...like green is love and green is, you know, growth and green was like supportive and green is like, you know, half of the color of our entire Earth and everything that, you know, in nature, a lot of it is green...Like just green felt so like earthy and loving and, you know, and very, very fitting to like a supportive natural growing person. Red I chose for rage and frustration and, uh, like just very bold and very bright and very, like, kind of in your face. And like the entirety of this person was red, and that's why they were like struggling to swim in the water.”

Then he explains how his religious background played into how he represented the people in the picture and what they were doing:

“Uh, and that fisherman, um, because of like, I, I mentioned my kind of Christian ties and my religious ties as I, I, uh, was growing up...Jesus had his disciples, their profession was fishermen. But it was also to be like fishers of men. Which I, I find is like, like, ‘okay, that's a cool metaphor.’ You know, like to be a Fisher of Man, what does that mean? Like I am seeking out other men, other, other people, mankind, you know, I'm seeking out these people for what purpose. And of course, from, you know, in the, from the Bible's definition and you know, in Jesus' eyes, you're, you know, you're discipling to others.”

Although Isaac no longer aligns with Christianity, it deeply influences his processing and expression of the experience in the painting. At the same time, this perspective of seeing Jesus' disciples as "Fishers of Men" relates to the answer he received to the question he posed before his psychedelic experience:

"But I felt tied to this fisherman in a sense of like a fisherman is patient, a fisherman, uh, is calm. They, they work with the water, they work with the animals, they work with, uh, you know, the elements in a sense to, to succeed rather than like, you know, like forcing something to succeed. You know, sometimes you go fishing, and you don't catch anything, but you still had a good time. Um, and so I gave that person, you know, the green fisherman- as a sense of like fishing for others, but also like being open to catching something versus the idea of like, you know, you must go out today and you must disciple and you must change five people's minds. You know, like that's, that's not sustainable. That's not possible. That's also not guaranteed. That's, you know, you, you, so it's-. I like that the, the metaphor and I kind of like take, you know, uh, allowing in a sense that fisherman waiting there for the, um, the person who is struggling in the water, whether or not they want to reach out or not like it's, it's that person's prerogative and, and ultimate decision."

By painting the patient green fisherman, Isaac imagined, visualized, and recreated himself as a patient and calm person, walking the path with others waiting for them to make the right decision, compared to forcing them to walk the correct path when they were not ready. Finally, he reflects on the connection between the painting and his experience:

“It was, uh, that's kinda like the vision that I got that, or that I wanted to like, demonstrate through art as a representation of myself and my journey and kind of what I had gone through recently and how I felt like- of course, I can be both people. I can be that person in red, and I could be that person in the green, but it was, it was like great, it was such a great feeling to feel, to like realize, ‘oh, I can also be that person in green.’”

In addition to processing his experience, Isaac reconnected with his lost passion for creating art. Since the experience, he has continued to indulge in different art forms as he works through his experience. Ultimately, he took his thoughts from the experience, realized the answer to his question, and reflected on it using painting as a creative outlet to recognize himself as both the green fisherman and red swimmer. He continues to use creative arts to integrate his experience.

Struggle as Part of the Experience

One last component of transformative psychedelic experiences worth mentioning is the idea that challenges or struggles are sometimes a necessary part of the transformative experience and process. A few participants speak to this notion. For example, Colt talks about how challenges one faces in the experience are part of growth and change. One participant explained a festival where it rained most of the weekend, and he had to walk through the mud leaving him discouraged and wanting to leave. On the festival's last day, he had a profound experience and received the message that you have to pay the price to get something good. He said, “Out of all the struggle from this entire weekend, it led you to this moment. If you didn't struggle, you

wouldn't have made it here, and you wouldn't have had this amazing experience, so everything's worth it.”

Roman also speaks to the value of overcoming suffering to experience growth. “It was both simultaneously the absolute worst, most fear-inducing experience of my entire life. Um, and also perhaps the most important and transformative. So even though there were parts of it, and maybe even the majority of it, that was [RM sighs] heart-wrenching honestly, I would do it over and over again, an infinite amount of times because of the benefit that I think I got from it.” He further describes how it is necessary to experience suffering to understand the value that comes from the experience. “That contrast between the, the worst feeling I've ever felt in my life, feeling like I just couldn't bear it anymore, um, feels like it was absolutely necessary in order to experience the positive sides of it. So that Ying and Yang kind of understanding that we only know what anything is relative to something else...And by that understanding, it's almost like I become grateful for the negative things that happen.” Something unique about recreational psychedelic use at music festivals is the lesser controlled nature of the context and setting of using psychedelics. Clinical studies aim to control these variables to reduce the probability of adverse outcomes or “bad trips.” At the same time, participants speak to the beauty and growth that comes from facing challenging experiences that others may describe as “bad trips.”

Summary

The two key components in defining transformative experiences are 1) a shift in internal patterns and 2) action or changes in everyday behaviors related to them. It is possible to have insightful thoughts during a psychedelic experience that do not result in everyday changes. Participants do not define these experiences as transformative, meaning it requires both

components of the definition to be present in one's experience for it to be transformative. This definition relates to Brouwer and Carhart-Harris' (2021) concept of transformation in the framework of (PiMS). What makes participant definitions unique from that of Brouwer and Carhart-Harris is the requirement for both components of thoughts and actions for transformation. For Brouwer and Carhart-Harris, cognition, perception, action, and behavior are more generally grouped together. In both cases, these definitions speak to the internal and external processes that denote transformation.

The internal processes of changes in thoughts or emotions parallel Brouwer and Carhart-Harris' argument on transformation coming from the process of changing self-narratives. Changes in perceptions of the self, thoughts, or emotions, as described by participants, may reflect changes in self-narratives in a similar way that Brouwer and Carhart-Harris discuss. The study does not aim to compare these specific components, but it suggests a potential similarity in processes that illuminate transformation.

Participants reveal the diversity of themes related to changes in their life from such experiences, including increased empathy for themselves and others, positive contributions to mental health, enhanced outlooks on life philosophies, overcoming addiction, finding meaning in life and changing careers, and fulfilling religious and spiritual transformations. An essential piece that bridges thoughts and actions is the practice of self-reflection, which typically takes place through different forms of integration. Self-reflection and integration connect the inner and outer world by processing thoughts, feelings, and emotions from experiences and determining ways to enact action and change, leading to transformative outcomes. Brouwer and Carhart-Harris (2021) identify integration as a pivotal part of making sense of changes in self-narratives and the actions that result from them. Some participants establish routine integration practices

like meditation or journaling. Others use formal avenues like therapy. Others follow more informal methods by casually conversing or swapping stories of their experiences with friends or family. An important note is the role of communities in participants' ability to feel comfortable sharing their experiences and processing them to make meaning and change from them. Combined thoughts, reflections, and actions merge through integration processes, creating meaningful, transformative experiences. Detailed participant experiences, reflections, and outcomes speak to this dynamic collision of elements. Additionally, participants recognize that part of the process includes challenging experiences, which require further exploration and processing to initiate transformative outcomes.

CHAPTER 9:

THE CHEMOSOCIALITY OF PSYCHEDELICS AT MUSIC FESTIVALS

Introduction

Chemosocialities are “conditions of knowing, being, and sociality” or relationships and ways of being in the world influenced by dynamic collisions between human and chemical interactions (Shapiro and Kirksey 2017:482). They are composed of entangled assemblages that intra-act to create new socialities. Recreational drug use is an example of human chemical intra-actions resulting in chemosocialities. Psychedelics are tools that people can use to develop new connections and relationships. The contextual elements of recreational drug use serve as the assemblages or individual pieces reiteratively entangled within each other along with humans in processes of intra-action. The drug (psychedelics), set (mental state, religious frameworks, preconceived notions of drug experiences, intention), and setting (the physical environment of nature, community, vibe, music) converge through processes of pleasure as intra-actions to generate transformed relationships among people, psychedelics, oneself, and the environment.

This chapter discusses three things: 1) the contextual elements of the chemoethnography of psychedelic experiences, 2) how transformative experiences happen, and 3) the necessary factors for creating transformative experiences. I organize the chapter to address each of these pieces. First, I identify and associate the different factors of chemoethnography and chemosociality with components of the psychedelic experience. Within the presentation of these relationships, I incorporate discussion on how these pieces conglomerate through processes of intra-action and *becoming with* to demonstrate how transformative experiences manifest. Finally, I explore the

chemosocialities that emerge from the chemoethnography of psychedelics to determine the necessary pieces for making these experiences happen. I conclude the chapter with a reflection on conducting chemoethnography within the context of recreational drug use.

Psychedelics, Faith, and Liminality as Assembled Intra-actions

Assemblages are the foundational components of chemosociality. They are a collective gathering of individual parts contributing to the whole. Understanding assemblages requires examining the chemicals within chemosocialities along with the holistic non-human actors that contribute meaning to them, in the same sense that Shapiro and Kirksey (2017) include “forms of not-Life and other-than-Life” factors. Human-chemical interactions occur amongst contextual elements, such as the physical and material environment, social, political, and economic institutions, and sentimental relationships (Shapiro and Kirksey 2017). The drug, set, and setting are individual parts that come together within the context of recreational psychedelic use at music festivals. The assemblages and processes of intra-action they participate in explain how these elements contribute to transformative experiences. These processes include ascribing faith and meaning responses to psychedelics and traversing inner and outer worlds through liminality and absorption.

Drug

Zinberg (1984) argues that the drug is a significant variable that comes together with the set and setting. The dose and pharmacological effects of the drug were a prevalent theme in participant interviews and a salient factor for survey participants who scored as having a mystical experience. Participants identified experiences of oneness and connectedness to others as crucial

parts of the experience resulting from the pharmacological effects of the drugs. Alone, psychedelics are an expression of pharmacological effects on the body. Some participants described these effects as variable heart rate, pupil dilation, and increased body temperature. Turning drug effects into an assemblage by giving them meaning requires a process of interaction. This process takes place when psychedelics assemble with elements of the set.

Set

My examination of recreational psychedelic use at music festivals found evidence to support the role of the psychological set in contributing to transformative experiences. The survey and interviews revealed the role of emotional frameworks going into an experience as an essential element. They identified past trauma, like romantic breakups or childhood trauma, experiencing life transitions, facing drug addiction, and working through mental health ailments like anxiety, depression, and PTSD as impactful mental states on their experiences. My research also highlighted the importance of preparations, intention, religious and spiritual frameworks, and community on the experience.

Spiritual and religious beliefs are one framework that influences people's psychological state in many ways. One way is in how these frameworks influence intentions going into the experience. One's level of spirituality can impact what they are interested in getting out of the experience. For example, Maria grew up Christian. Through psychedelic experiences, she moved away from organized religion to find a more spiritual form of practice. Each psychedelic experience built on previous ones allowing her to deconstruct Christian ideas and practice and reconstruct a new form of spirituality. These reiterative assemblages of spirituality influenced future intentions, ultimately influencing subsequent psychedelic experiences. Additionally,

preparing for experiences with spiritual purpose and engaging with spiritual readings, such as Alan Watts or Ram Dass, shape intentions of future experiences, as noted in other participant narratives. In some cases, these intentions shift to focus on having a spiritual awakening or experience of non-duality, as Roman describes it. Religious or spiritual ideology can assemble with cultural perceptions of a drug experience to illustrate how transformative experiences occur.

Faith as an Assemblage of the Psychedelic and Set

Whether participants have formal religious or spiritual frameworks, they use terms resembling religious pillars. For instance, they speak of “having faith” in the experience, which resonates with the practice of having faith in any religion. Drew explained that he “trusted the experience,” meaning there is trust or faith that the experience “gives me what I need” whether he knows he needs it. He is saying that the psychedelic knows what he needs to receive from the experience, and he trusts that it will provide it for him. Faith in the experience and the drug explains how transformative experiences form in four ways. First, it initiates an assemblage between the person taking the psychedelic and the drug. It brings together the individual, their mindset, and their expectations of the experience and drug effects. Second, having faith in a psychedelic and the experience it provides ascribes agency to it. This ascription of agency is a process of intra-action because it is the intra-action that allows for agency of all involved actors. The intra-action between a person taking the psychedelic and having faith in the psychedelic ascribes agency to the psychedelic. Third, this process of intra-action also forms an entanglement between the drug and the person taking the drug. Ascribing agency in the intra-action is an entanglement. Fourth, ascribing faith in a psychedelic elicits a meaning response. As argued by Moerman and Jonas (2002) ascribing meaning to a substance gives power to its physiological

effects. Physiologically, psychedelics do something in the body. Participants describe this through sensory changes, like seeing light trails. Like placebos, the meaning given to psychedelics and the agency (faith) ascribed to them creates meaning within the experience. This meaning can be positive or negative but ultimately generates meaning. Ascribing faith in the experience creates meaning in the experience, which is then one of the mechanisms in making it transformational.

Setting

My research highlights some of the elements of the physical, environmental, social, and cultural contexts of psychedelic experiences found in other psychedelic studies. The music festival environment provides a unique dynamic, playful, and interactive aesthetic component to the setting. Aesthetics of the festival environment constructs multiple spaces and alternative worlds filled with artistic playgrounds, lights, visualizers, and fashion statements as extensions of festival art. They mix various types of art within the space, allowing people to choose how they want to interact with it. The interaction of people within their environment through play and art is an assemblage. For example, Oscar describes his sensory deprivation experience, wrapped in a cocoon hammock with LED light-up glasses, enveloped in headphones playing binaural beats. My study participants speak to art as a compositional factor in building and experiencing alternative realities and worlds within their environment and experiences. Engaging with elements in these spaces is a process of building assemblages within the setting of music festivals.

Another critical component of the music festival setting is access to natural spaces. Music festivals take place in various locations, often outdoors and situated within beautiful natural

landscapes featuring hills, trees, water, and naturally comfortable spaces for people. These spaces allow people to connect with natural elements during their experiences. This direct connection to nature is evident in how participants describe feeling connected to the trees or the stars and, in some cases, feeling as if they could communicate with them. Much like engaging with interactive art at festivals, being in natural spaces connects people to nature and creates another assemblage to the setting.

Music is also unique in the festival setting. In the survey, participants identified “the music” as the third most salient factor impacting their experience ($S=0.002038$). Notably, participants identify the element of live music as an essential piece of the psychedelic experience in this setting. Floyd discussed how watching the creation of live music generates a sense of being present in the moment, something he does not see as being achievable through listening to recorded music. Participants further identify the lyrics in the music or messages conveyed by DJs and musicians during their performances as influential on their experiences. In some cases, the DJ can function as a technoshaman, leading people on a journey through their psychedelic experience (Hutson 2000; Takahashi and Olaveson 2003). In the way that shamans use icaros, chants, and rhythm to move people through emotions and feelings of the experiences, DJs can use changes in tempos, rhythms, messages, or lyrics for the same purpose. Francis described having a challenging time on LSD and MDMA while waiting for the music of the next set to start. Once the music started playing, he did not feel overwhelmed by the experience anymore. The music gave him something to lean into, put faith and trust in, to move through his uncomfortable feelings. The dynamic nature of music is filled with everchanging rhythms and can push people through challenging thought patterns or emotions, releasing them from what feels like an endless loop. Similar to putting faith in the experience, ascribing faith in a DJ or the

music to guide someone through their psychedelic journey is an assemblage between a person, the music, and the process of creating music.

The crafted music and art at festivals in natural environments present opportunities for people to engage with the situational elements of the setting. These relationships build assemblages between people and their environment. Additionally, the music, art, and festival productions form “technoaesthetics” (Kyriakopoulous 2021) in unique assemblages. These “technoaesthetics” can combine with the psychedelics' physiological effects, allowing people to journey between inner and outer worlds that are otherwise inaccessible in everyday life.

Context, Liminality, Absorption, and Pleasure in Escaping the Everyday

The setting plays a vital role in creating worlds outside of everyday reality. These alternative worlds initiate processes of intra-action and reconfigured assemblages that create pleasurable experiences. Leaving day-to-day work and familial responsibilities is a process of disentangling from one set of assemblages. Entering the music festival world is entangling in a different set of assemblages. Along with this process of rearranging entanglements from everyday reality to music festival reality comes a sense of pleasure that can lead to therapy and healing. For example, one survey participant explains their experience “it made me realize that it is necessary to escape from the day-to-day, busy pattern of everyday life. That it’s okay to dip your toes in some other world. That world being a world away from your everyday commute, everyday tasks, everyday stresses. To be around people who are on the same level as you and for the same purpose of taking a break.” The dominant narrative within the literature on drug use and pleasure highlights people escaping reality, objectifying people who use drugs and labeling them as irresponsible and “adrift from society” (Daly 2017). In one way, this study supports that

people use psychedelics at music festivals to escape reality, but it is not in a hedonistic or detached sense. As the survey participant mentions, resettling in a new entanglement of reality allows for stress relief. The idea of escaping from reality present in the literature is not necessarily wrong. Instead of escapism, it rearranges the entanglements one finds themselves in from those in every day to those at music festivals.

Attending music festivals and engaging in recreational psychedelic use is a practice of liminality and absorption. Victor Turner's (1969) concept of liminality functions as a process of intra-action, and absorption is a process of *becoming with*. Leaving everyday life and entering the music festival is one process of liminal intra-action, where the setting of the music festival and the person entering that setting reconstruct and negotiate reality cooperatively. Taking psychedelics is another process of liminal intra-action. The music festival and psychedelic experience is a set of new worlds, a psychedelic playground within the mind and in the physical and social context of the festival. The connection between altered internal and external worlds mirrors the same relationship in defining transformative experiences. A survey participant explained, "Falling in love with festivals gave me a motivation to be a better person. It gave me something to look forward to while I'm feeling depressed as I struggle with bipolar disorder. It even gave me motivation to be healthier and start working out." This example shows the connection between the internal mental state created in conjunction with the external experience of the music festival setting. This relationship is not inherent but supported, maintained, and constructed through the intra-active process of liminality in the festival setting and psychedelic state. For example, Cassidy described how psychedelics allow her fears in ordinary life to fade, leaving way for open and honest communication, self-reflection, and feelings of connection, love, and joy. At the same time, the creation of alternative worlds at music festivals creates

environments away from everyday work environments, jobs, and homes. The assemblage occurs between the festival setting and the psychedelic state, establishing liminality and allowing people to explore “inner and outer worlds” otherwise not accessible (Kyriakopoulos 2021).

Luhrmann’s (2010) absorption hypothesis finds that when people become deeply entangled in processes of intra-cation, they become completely absorbed. They *become with* the assemblages, entanglements, and actions. This experience of *becoming with* is another way to explain how people escape reality. Liminality is a mechanism for transferring from everyday life to festival life. Absorption describes how people become transfixed within the inner and outer liminal spaces and how it contributes to an altered state of consciousness. Stromberg (2009) works with this idea by examining how people engage and play through entertainment, like books, games, and movies. By engaging in play, people become absorbed into altered states, such as pleasure, self-indulgence, and consumption.

Similarly, festivalgoers engage in play through the inner and outer worlds. Through the effects of altered states induced by psychedelics, they engage in internal play within the mind. In the external world, they play within the festival environment, engaging with interactive art, dancing to music, and socializing with friends. These activities enact Watts’ (1962) idea of purposeless play outside the confounds of daily life through “calculated hedonism” allowing festivalgoers to step away from daily responsibilities without completely disregarding them (Measham 2004:321-322). As a result, they become absorbed in pleasurable play that can be therapeutic and transformative. Jillian provides an example of this, saying how she felt comfortable letting go of her everyday stresses and anxieties that caused her pain and suffering to enjoy being in a different state. She could then carry this therapeutic feeling back into the everyday world. Transferring the therapeutic feeling back to the ordinary world speaks to

absorption in that the effects of the intra-action between the drug, setting, and liminality extend beyond the immediate act of play. Participants absorb the pleasure and transformative impact of the experience and carry it outside the liminal state. Ultimately, engaging in recreational psychedelic use at music festivals is a form of escaping reality, but it is not a form of escapism. Instead, it is a calculated process of disengaging and re-engaging between ordinary reality and the music festival and from the everyday mind to the psychedelic mind. It is intra-action through liminality and absorption that reduces the confines of daily life in search of peace, tranquility, healing, and transformation.

The drug, set, and setting are contextual elements of the psychedelic experience. Ascribing faith to a psychedelic assembles perceptions of drug experiences to generate a meaning response. Interacting with physical components, like art, nature, and music, are assemblages between festivalgoers and the setting that establish “technoaesthetics.” These assemblages develop further through processes of intra-action initiated by liminality and absorption that generate pleasure, healing, and transformation by exchanging internal and external everyday realities for those of festivals and alternative states of consciousness.

Entanglements of the Music Festival

Entanglements go beyond the individual elements of assemblages to bring them together through intricate connections and attachments. They are complex in that they enmesh within each other, rely on one another, and are inseparable from each other and the overall whole they compose. Studying these relationships and entanglements is a form of examining “matter in relation” (Abrahamsson 2015:13) and understating the “social, suggestive, spatial, placebo,

material, cultural, symbolic, and semiotic events” that impact experiences (Talin and Sanabria 2017:27). The assemblages of the drug, set, and setting collide in dynamic entanglements within psychedelic experiences. This section examines some of the entanglements between these assemblages. In the following section, I address each contextual combination in turn. Further, I discuss entangled patterns between them, including how pleasure enhances context and how festival entanglements create structured experiences comparable to psychedelic therapy protocols.

Entangling the Drug and Setting

The drugs are the psychedelics people take, and the setting is the music festivals' physical and cultural context. Event organizers and artists craft parts of the festival setting to represent and recreate the psychedelic experience. However, that experience is not entirely achievable without the pharmaceutical effects of the drugs. There is a complex entanglement between these two factors. For example, the different types of art and various activities provided at festivals resemble the visual alterations experienced while on psychedelics. At one festival, an artist talked about the art she creates, saying, “As you walk through my world, I hope you feel the psychedelic experience as a spiritual connection that can permeate everyday life, a window into vastness of the multiverse, and instead of being overwhelmed or intense, it feels like a big warm hug.” This artist speaks to how she creates art to invoke a psychedelic-like experience in an unaltered mind while also feeling comforted by the psychedelic-like state. Another festival's website states “we are committed to individual transformation and awakening our full potential by being a beneficial presence on the planet. Through art, music, dance, yoga, meditation, spirituality, and a deep connection with nature, we free ourselves from the shackles of our

current paradigm and become what we are truly meant to be; conscious, enlightened co-creators that will bring heaven to earth.” This statement does not speak to the use of psychedelics, but it does highlight how facets of the festival environment (setting) relate to “individual transformation and awakening.” While festival organizers carefully craft the environment's art, activities, and other elements to recreate psychedelic-like experiences, they are missing the extra-sensory parts of the psychedelic experience. They are missing the physiological sensations or synesthesia, the merging and blending of the senses within the environment. The environment is a fun playground of trippy, interactive, and creative pieces. The drug is a bundle of mental and physical alterations to the senses. Together the drug and setting create a reiterative and entangled experience. The environment relies on the chemical-level relationships in the body, while the body depends on the artistic playground of the festival to create a situationally personal and unique experience. It is not just the chemical experience. It is not just the environment. It is a delicate entanglement of how the drug influences the perception of the setting and how the setting enhances the drug experience.

Entanglements also bring together drug effects and stage production. A survey participant speaks to how these elements converge by replying, “My emotions and feelings of oneness made it transformative, but those may not have occurred if I had taken the drug or were listening to the music.” The feelings of oneness speak to the effects of the drug, which, in combination with live music (setting), created their transformative experience. Another survey participant identifies live music and feelings of connectedness from the drug effects as essential to their experience. “This specific experience was so transformative because live music has always been my passion, but being able to feel fully connected to thousands of people was an experience I will never forget.” Scarlet shares similar sentiments to the combined effects of taking LSD with live music

and stage lights relaying the feeling that “they made this for me,” meaning the festival created the environment for people in altered states of consciousness. We can theoretically separate the music, stage production, and drug effects in the same way as the art and drug effects. In the experience, the drug enhances the music and perception of the lights and stage production, while the music and stage production enhance the perception of the psychedelic experience. This entangled enhancement makes people feel deeply connected to the setting and powerful moments.

Nature, as another contextual element of the setting, combines with the drug to create deep connections between people and space. Oscar recalled such an experience at a festival. He took more LSD than he intended with MDMA and did not sleep during the festival. The combination of these psychedelics and the neurological state of sleep deprivation created a unique concoction for an altered state of consciousness. Coupled with being at a festival out in nature, Oscar recalls how these two elements intersected. “I remember just laying down in the grass and looking at the stars in the sky at this absolutely beautiful skyline of just stars. There was, like, no light pollution. I could see all the stars. And I just felt so connected to the universe in a way that I don't think I had before.” The effects of the drugs, combined with being out in nature and looking at the stars, resulted in a deep connection to the cosmos. The physiological drug effects and being in nature entangle into a complex relationship of enhancing the experience of one another.

At the cultural level, the social environment entangles with drug effects. For example, one survey participant brings together the minute and cumulative physiological effects of psychedelics stating, “to experience the synapses firing thousands of times more than they should, I try to capture every second because it's not so much the peaks that are great. When

you've been lucky enough to have the experience, you tend to value every stage of the drugs because each stage brings a different set of stimuli, and being aware of these slight changes is exactly what I'm looking for." Then they continue to bring the drug effects into the context of the setting. "It's the totality of the event. It is not about each moment in isolation. A cumulative expose for the soul to dance in harmony with all that surrounds you. This is the psychedelic experience." In this example, there are multiple assemblages of the drug and setting that combine. First, the chemical and neurological effects assemble. Second, this assemblage then entangles with the social context of the festival environment. Third, the shared psychedelic experiences of the surrounding community enter the entanglement. This complex web describes what makes this experience transformative and meaningful for this participant.

Drug effects and components of the festival setting entangle in participants' psychedelic experiences. First, psychedelic effects influence artistic creations of the festival environment. At the same time, complete immersion in these psychedelic worlds is incomplete without experiencing them in psychedelic states. Second, sensory changes caused by psychedelics create unique experiences in feeling the music. Third, being embedded in nature while experiencing psychedelic states deepens connections to nature and feelings of oneness. Fourth, psychedelic effects entangle with socialization, community, and collective experience, creating deeper relationships with others. These combinations reveal the entanglements between psychedelic effects and elements of the music festival environments. However, they do not explain how these entanglements are related and how transformative psychedelic experiences occur. A common thread among these entanglements is how the contextual elements of the music festival enhance each other. The psychedelic effects enhance experiences of art, music, lights, nature, and community. The question then becomes, what is the process of intra-action or of *becoming with*

within these entanglements of enhancement that create transformative experiences? Engagement with pleasure provides a framework for exploring this question.

Pleasure in Enhancing Context

Duff (2008) presents the idea of pleasure in context, meaning that studying the context of drug use illuminates how people experience pleasure through practice, space, and embodiment. The pleasure in context explains the process that creates meaningful experiences for people when elements of the festival setting entangle in psychedelic experiences.

People participate in practice through dancing, flow arts, and socialization. Pleasure is a process of intra-action between a person and engagement with practice. For example, how participants speak to being enveloped in the music and feeling it while dancing is a pleasurable intra-action between the physiological effects of the psychedelic and the practice of listening to music and dancing. Elise additionally remarks, “the drug itself obviously helps enhance things, and it helps you see things that you may not otherwise see or hear. And so, it was just fun to be in the moment.” Enhancement of the entangled contextual elements results in intra-actions of pleasure, while pleasure enhances the entanglement of contextual factors.

The entanglement of pleasure and psychedelics enhances participants’ space and environment. The connection to space can be physical, like how Helen felt deeply connected to the Oak trees surrounding her during her experience. It can also be a connection to the social environment and how the drug enhances the positive vibe of the community. As someone posted on a social media page about a festival, “As someone who isn’t too ‘into’ electronic music, the vibe and love I get from the space created by the whole team is something I cherish deeply... You all created this environment for not only me but countless others that need an escape and a

place to let their freak flag fly.” Being in a supportive social environment in combination with the effects of the drug created a pleasurable sense of connection. This connection to community relates to Victor Turner’s (1969) “spontaneous Communitas,” which involves intense feelings of unity, togetherness, and shared humanity that break down social structures and blur boundaries between the self and others, creating collective effervescence. Collective effervescence is recognizable in descriptions of psychedelic experiences of unity and oneness, increased openness, and connections to people (Bøhling 2017; Malbon 1999; Redfield 2017). Oscar describes these feelings of oneness and connection “it felt like I was connected to everything and everyone.” A survey participant also communicates this concept of Communitas “Everyone feels connected and a part of a larger community than they do within daily life in society.” The way participants describe and speak to the idea of vibe or all-encompassing energy carried within the collective community composed of peace, love, happiness, support, safety, positivity, and acceptance that becomes lost in everyday life. It is another experience and form of Communitas generated within the music festival space. Creating a pleasurable community vibe is an entangled process of intra-action with other contextual elements of the psychedelic and music festival experience.

Pleasure is a process that emerges from taking drugs and how it enhances one’s embodiment. Scheper-Hughes and Lock (1987) identify three forms of embodiment: subjective, social, and political. Participants discuss embodiment with their personal experiences. They feel deeper connections to their physical body and inner self. Jillian describes embodied pleasure “I’ve never felt so connected with my body. And I have never looked at my body that way. And I felt so connected and in love with it.” Social embodiment is how the body functions “as a microcosm of the universe” (Scheper-Hughes and Lock 1987: 21). Isabell speaks to social

embodiment. She experienced the pleasure of embodiment while on MDMA and looking up into the sky, feeling like her body and soul joined with her friend, who passed away from cancer earlier in the day. The physiological effects of psychedelics entangled in the music festival context creating a sense of connectedness, self-love, and joy. She then reflects on the greater cosmic conception of her friend's death. The political body represents regulation, power, and control over behavior. These entanglements intra-act to support resistance to this idea of political embodiment. Instead of constraining bodies, the entanglements of the drug and festival create opportunities for release from political embodiments. Entering the liminal space of music festivals and altered states frees participants from the confines of everyday life. It untethers the social and cultural restrictions that dictate how people should behave in social and cultural environments, how they should dress, and what they can or cannot do. The pleasure of drug use in the context of the political embodiment is a process of intra-action that constructs and maintains the community vibe within the festival setting. I expand on the role of the community in the psychedelic experience in a later section.

Entangling the Drug and Set

The physiological effect of the drug also interweaves with the participants' mental state. As Roman explained in his experience, the effects of the drugs are “a connection there with just everyone around me and with the environment,” which combined with the emotional guilt and grief he held from the recent death of a friend and the heartbreak from multiple ended romantic relationships. The result was “tears streaming down my face because I was, uh, I was just letting go of a lot of stuff that had, that had built up, um, before then...but that was cathartic.” Jillian demonstrates another example where drug and set merge. Going into the experience, Jillian

stated, “I had struggled a lot recently with depression and anxiety. So bad that, like, I would wake up and like exploding head syndrome where you feel like you hear something exploding outside.” In her experience, her mindset combined with the effects of psilocybin and MDMA. This entanglement allowed her to feel connected to herself and the universe, resulting in a therapeutic reset she carried into everyday life. Finally, Helen presents a unique blending of drug and set in a description of one of her workshop experiences. While at a festival, Helen participated in a Shamanic journeying workshop. The workshop leader drummed while guiding her through a visualization of going underground through the hole at the base of an oak tree to discover her power animal. During the experience, she was sober. Later in the festival, she took MDMA and found herself in the center of massive oak trees. She explained being able to feel the spirit of the trees coming out of the ground and connected to them and other natural beings. In this example, Helen’s mental state is grounded in the sense of connectedness to the oak tree from her workshop visualization. Later in the experience, under the influence of MDMA, she further experienced this connectedness.

Another entanglement of the drug and set is perceptions of drug effects. One way to measure drug effects is through the physiological changes created by drugs, such as changes in heart rate or respiration. This project did not measure drug effects using these methods. Instead, it relied on the subjective accounts of participant experiences in conveying these experiences. Participants filter the sensory changes caused by psychedelics through their perspective. These perceptual filters influence the words and descriptions participants use to share these experiences. In some cases, participants described the effects very differently from one another. For example, Joe uses the term vibrations to express a feeling he experiences when coming up on MDMA. Scarlet focused on the sensations of being sweaty and hot while on MDMA. In other

instances, participants use similar terms or phrases to describe the sensory experiences of psychedelics, despite diverse backgrounds, education levels, and perspectives. For example, multiple participants described lights and colors as brighter and more vibrant. Others described visual patterns using terms like “fractals” and “geometric.” Multiple participants use the word “euphoria” or “euphoric” to describe MDMA/MDA. Many participants also describe their sensory changes as “better” than everyday perception. When explaining feelings of connectedness, participants often use the term “consciousness,” “consciousness source,” “connected consciousness,” and “oneness.” Related to these descriptions, many participants relate feelings of love to feelings of connected consciousness. Ultimately, individual perception shapes how people describe their sensory changes related to psychedelics. At the same time, people describe these changes using similar terms or concepts. Some other entanglement connects these perceived sensory changes to how people express them similarly. That entanglement may relate to the community. When people share their experiences with their social groups, they also share perceptions and ways of describing their experiences that then transfer to other iterations of sharing their experiences. This pattern may suggest a more significant community perception of experiencing and describing these experiences. Like Becker’s (1953) article, social groups learn and experience drug use together, thus sharing knowledge, vocabulary, and perceptions on describing sensory drug changes.

Entangling the Drug, Set, and Setting

While the previous sections introduce how the set and setting individually entangle with the drug effects, the genuine entanglement in the chemosociality of psychedelics emerges from combining all three contextual elements. Zinberg (1984) suggests bridging drugs’

pharmacological effects with the contextual aspects of the set and setting. Isabel Jones' experience speaks to these entanglements. She identifies the drug, "I took 120 mg of MDMA," and then the setting "It was a beautiful evening, and you could see every star in the sky, and the moon was intense." Then she brings together the drug effects and her mental state. On the morning of her experience, she found out her best friend had died of cancer. "I felt so connected to Krista - I felt close to her spirit, almost like I could feel her there literally with me." Her story bridges being in nature, her grief over her friend's death, and feelings of connectedness:

"and then felt like I could feel her spirit traveling up to the stars and up to the moon, out into the universe to be free from pain and free from the body that had failed her. Looking at the moon (which is female energy!), I felt connected with her. I felt like she was telling me that it was okay and that she wanted me to be there at the festival surrounded by love and music...I've never felt so spiritually close and connected to someone close to me that passed way than when I was at the music festival and taking MDMA."

Additionally, she reflects on the experience and identifies how the drug, set, and setting came together to create her experience:

"I think the drug allowed for parts of my brain and neural circuitry that are normally 'silent' to be 'awaken' for a brief moment to expand my consciousness and allow me to connect with her and the universe on a higher spiritual plane. Rather than feeling sad and alone, I felt connected to her and the other people around me. That was the most intense part for me, looking up at the stars and moon and almost feeling like I was WITH her. I'll

never forget that. And then a wave of peace washing over me, like she was telling me it was okay.”

In Isabell’s reflection, she uncovers another factor of her mental state. She had a history of using drinking as a coping mechanism. She explains how being in a different environment and working through the same grief would result in a different outcome. “I truly think if I had found out in a different, normal situation (aka, at home on a regular day) that I would have gone to drinking heavily, likely blacked out, and just further separated myself from friends and other people and fall deep into a depression.” Isabell’s example does two things. First, it highlights the entanglements of the MDMA effects with her grief over her friend's death while in nature at a music festival surrounded by a supportive community. Second, it speaks to how changing parts of the entanglement can significantly alter the outcome of her experience. If she were alone at home, her grief could entangle with her history of alcohol use. The result would have been much different, possibly blacking out and worsening her mental state with social separation and depression.

The right combination of drug, set, and setting elements is essential to creating various outcomes for experiences. Glenn speaks about finding the right arrangement. “It takes a very specific kind of recipe. A specific kind of chemistry, but more than just the chemistry of the, of the drugs in the body, but the overall chemistry of the experience. So, it's a certain amount of drugs at a certain place, with certain people, with certain sounds.” In this statement, Glenn is speaking to the idea of entanglements between the contextual elements and the right combination of them to achieve a specific outcome. He further explains, “it's got to be exactly right. Exactly right...I've had, you know, I've had experiences - so one thing that can go wrong is you can take

too much. And then if you do that, what can happen or has happened for me is it's overwhelming...set and setting really do matter tremendously, tremendously, I think, for these types of experiences [transformative] and what you're able to take from them." Again, he reiterates that having the wrong recipe of the drug, set, and setting can steer people away from having a transformative experience to having an undesirable or unpredictable one.

Another important theme of the entanglements is how community emerges as a cross-cutting theme within them. Community is a unique subject that spans the entire duration of a psychedelic experience and covers each of the contextual elements. Olivia's experience shows how community presents as an all-encompassing theme. Olivia talks about her experience taking mushrooms for the first time at a Primus show with her family. Community is present in the set because she is with her family. Before the experience, she recognized that being with her family for the experience provided a powerful sense of safety where she would not feel judged during the experience. During the experience, she relied on her family for support. In this context, her family was a factor in the setting. Additionally, the band played a song from her childhood. This song allowed her to tap into being with her family. In the presence of her family, with their support and feeling deeply connected to them, she felt like she could heal from past trauma during the experience. After the experience, she continued working through her trauma. She processed her experience with her family and a supportive counselor. In Olivia's case, her community was a supporting element before, during, and after the experience within the contextual assemblages of the drug, set, and setting. This example demonstrates the expansive nature of community and its essential role in transformative and general psychedelic experiences. This discussion on the entanglements between the drug, set, and setting is vital for understanding how these contextual elements merge through practice to create structured environments for

transformative experiences. The structure provided by this framework is comparable to that of clinical settings.

Merging Contextual Elements into Practice

Clinical research presents few arguments discussing the entangled relationships between the drug, set, and setting in therapeutic practices. However, it does argue for structured environments to increase the likelihood of positive benefits from psychedelic use. From the clinical perspective, Sepeda et al. (2020) argue that structured environments can result in positive benefits from psychedelic experiences compared to unstructured environments. In indigenous practices, Kettner et al. (2021) found that plant medicine ceremonies with organized and guided experiences could also lead to beneficial, long-lasting psychological changes.

The clinical perspective may argue that recreational use is unstructured, thus unpredictable, less controllable, and less likely to produce therapeutic outcomes. On the contrary, I argue that music festivals create a sense of structure in their events. The music genre and the time of day influence how and when people engage in different activities across the festival. As the observations from this research show, people use the mornings to wake up and prepare for the day by making breakfast, taking showers, getting dressed, and applying makeup. By the mid-to-late afternoon, people go into the festival to watch the first sets and shop at vendors. Later at night, people dive into the music and engage in drug use, which continues into afterparties after the main music is over. Kyriakopoulos (2021) explains that the production of soundscapes drives these patterns. The design of stages, the time of sets, and the types of music on different stages on certain days and at certain times create a timeline of events that runs the clock of the entire festival. While these patterns may not be as stringent as they are in clinical settings, the festival

context dictates the structure of these patterns. To argue that festivals are not structured enough to produce acceptable rates of therapeutic benefit is an oversight of clinical research in two ways. First, as evidenced in chapter 8, participants experience therapeutic outcomes in festival settings. Second, the rhythmic patterns of music festivals are very much structured to resemble protocols of psychedelic-assisted psychotherapy engaged in clinical settings.

In the MAPS protocol, after the initial dose, the patient places a blindfold over their eyes and noise-canceling headphones over their ears to listen to a curated music playlist. This phase allows the patient to immerse in the drug effects and the music and become introspective. In a way, it is a form of self-isolation from the therapist that allows introspection. The music festival equivalent is when people stand in front of the stage, engulfed in the music and entuned to their altered senses. Again, it gives them the space to become introspective. They can visit thoughts and ideas present in their minds. They are not physically isolated from the community around them. In some ways, they may feel deeply connected to them, but their thought process is internal for the moment, allowing them to be introspective. Joe explains the internal processing of his recent breakup during his experience at a music festival. “In the times where I was internalizing it, I was thinking a lot...And I feel like those are the better parts for me to learn about what's really going on because...when I really thought about it, and I really, like, kind of pinpoint, you know, where the hurt was coming from and where I was able to like catch myself not feeling it anymore. I felt like the internal part was more important to me.”

After the patient is in this introspective state for some time, the therapist has the patient remove the headphones and blindfold and discuss what they experienced during their introspection. This process takes the patient from being internal, isolated, and introspective to being outwardly integrated back into the social context with the therapist. Just like the patient,

people at festivals remove themselves from periods of introspection and internal isolation. Sometimes it may be when they leave a set and venture around the festival to another stage, their campsite for food, or to look at art. During this time, people reintegrate back into a social group. That group can be with friends or strangers in the community. During this time, people discuss their introspective experiences and process them with their social group. Isaac's experience serves as an example. After the music ended, he and his friends took an Uber back to their Airbnb. During the ride, Isaac processed parts of his experience with his friends:

“I'm like just basically pouring out to Clint and Nick kind of all of the things that I'm- all of the connections that I'm making in my head while they're sitting there listening with me and talking with me and kind of, uh, affirming all of the things that I'm saying in a, in a supportive way, but also like adding to, and, and being like, ‘Yeah, you know, Isaac, that's, that's such a great point. Like, I'm so glad you bring that up because, you know, it also ties into this and like how we can do and be this way for people.’... And so that was really wonderful to, like, feel that recognition from them.”

Isaac's friends supported him as he expressed his experience in a similar role as a therapist to a patient.

After the therapist has the patient discuss their experience, they encourage them to put the blindfold and headphones back on and reenter the isolated state of introspection. At festivals, people may again enter the entranced state of psychedelic drug effects and their introspective minds, much like psychedelic-assisted psychotherapy patients. This reiterative cycle between being isolated and introspective to reintegrating with the therapist in the clinical setting or social

group at the music festival oscillates back and forth until the end of the drug experience. With psychedelic-assisted psychotherapy, therapists typically schedule an integration session after the experience. This same process occurs for people at music festivals when they continue to share their experiences with others and process them after it ends. For example, Floyd spoke with his brother multiple times after his experience to process it.

The music festival may not always present these structured patterns in the way that the controlled environment of psychedelic-assisted psychotherapy does. As Prudence's experience demonstrates, not having a supportive social group during her experience made it more challenging for her and did not give her anyone to talk to and process the experience. As a result, instead of experiencing periods outside the cycle of introspection, her thoughts became looped in it.

At the same time, this fascinating resemblance between psychedelic-assisted psychotherapy and recreational psychedelic at music festivals illuminates many findings. First, it identifies the essential role of the community. Clinical applications rely on trained psychiatrists, but the community fulfills this function in recreational environments. It reconfigures the notion that trained professionals are the only people who can support someone through a psychedelic experience. Second, it identifies one of many potential mechanisms for potential therapeutic benefits from transformative experiences outside of meticulously controlled clinical settings. Music festivals are not highly controlled environments, but the pattern of activities helps create a structure that supports meaningful experiences. Third, it essentializes what makes the festival environment special. It presents a unique set of contextual factors that go beyond the pharmacological effects of drugs, which are too often the dominant perspective in clinical studies. Instead, they entangle drug effects with artistic playgrounds and supportive communities

to create something clinical settings currently fail to integrate. Not only do people receive the reiterative structure of psychedelic-assisted psychotherapy at festivals, but they also have the missing pieces of the clinical setting that they find most impactful in their recreational experiences: live music, interactive and engaging art, and a deep connection with a like-minded and loving community.

Psychedelic experiences do not occur in isolation. No individually-acting elements of the drug, set, or setting carry the weight and explanation for such dynamic experiences. Unlike clinical research that fights to control individual facets of the experience, the dynamic nature of entanglements seamlessly flows and presents itself within the music festival context. Attempting to control these webs of interconnectivity downplays the intricate dance that occurs at multiple levels. At the chemical and cellular biological levels of the human body processing and metabolizing the drugs and then combining with the calm seas and crashing waves of mental and emotional turmoil that eventually burst out of the confines of the physical and psychological self while melting the ego into the surrounding physical and social environments all in a repetitive yet synchronous pattern of being and becoming all at the same time.

Becoming With Community

Becoming with the community at music festivals through psychedelic experiences explains how transformative experiences manifest in these situations. Essentially, how festivalgoers build community contributes to creating these experiences. This process occurs through therapy management groups, conversations of caring, and the community vibe.

Hunt et al. (2007) recognized that the social trust between people reassures friend groups that they have someone to rely on if they have problems during the experience. Going into a psychedelic experience with a supportive friend group functions similarly to Janzen's (1987) therapy management groups. Social groups in recreational settings can function as therapy management groups. People with psychedelic experiences are not diagnosed with an illness *per se*, but these groups encourage and provide decision-making support for a person during their experience. For example, Roman's friend, Emily, supported him during his challenging experience, urging him to release all his negative energy into the ground, letting go of all his charged emotions around grief, guilt, and heartbreak. Isaac's friend Casey also served as a motherly figure during his experience. She reassured him it was okay to express any bound-up emotions he buried inside from being in the military. This support allowed him to release reclusive emotions through tears. Finally, Sebastian demonstrates how strangers can serve as support groups. When he was 15 years old at a Phish set on mushrooms and LSD, too overwhelmed by the experience, two strangers sat with him and talked to him. They then convinced him to get up and express his feelings through dance. Friend groups and strangers in the festival scene serve as assets of therapy management groups in navigating psychedelic experiences.

This form of social support occurs through Brosterhus' (2022) conversations of caring. Through observations, I found that people participate in conversations of caring within their social groups (therapy management groups), discussing what substances to take on which days of the festival, sharing intentions and purposes of use, educating each other on dose and drug use practices and harm reduction, and providing reassurance in the case someone has a challenging experience. As described by Prudence and Maria, having a reliable support group makes them feel safe, trusting, free of judgments, and supported by friends. This support can increase

confidence and reduce stress making the experience easier. Conversations of caring extend beyond the intimate moments of the actual psychedelic experience and encompass preparation and integration. This extension suggests how this practice entangles with other parts of the experience and describes how these experiences become transformative outside of the initial experience itself.

Therapy management groups and conversations of caring contribute to the creation of the encompassing community vibe, another essential component of *becoming with* in the transformative experience. The engagement and establishment of this festival community resembles Collins' (2005) interaction ritual in establishing social lives between festivalgoers. The larger festival community establishes an environment filled with acceptance, support, and freedom of expression. As Kira described, "it was just this like overwhelming sense of love and acceptance." Roman agrees with this, saying that the community fills the environment with "peace, love, happiness kind of thing, and everyone is on that same kind of wavelength." These statements align with the community acronym of PLUR, peace, love, unity, and respect, which is a central part of creating a positive vibe in the recreational music community. The collective community supports "spontaneous Communitas" in the festival environment, which unifies everyone. This unity then reflects the social embodiment of the community, as defined by Scheper-Hughes and Lock (1987). Essentially, individual community members support each other through interaction rituals throughout their psychedelic journeys. These rituals contribute to a comprehensive Communitas that becomes reiteratively embodied through psychedelic experiences.

Chemosocialities: Results of Entanglements and Intra-action

In this study, when participants use psychedelics, they form new relationships with elements of the experience. Those elements include the drug, set, and setting, along with the person's identity and their relationships with themselves. In essence, psychedelics act as agents that initiate change in the relationships between people, themselves, others, and the context of their drug use. Because each contextual element is dynamically entangled, the entire psychedelic experience is reiterative. The entangled intra-actions between them define their meaning, function, and existence within each situation. When any of these elements change, meaning the set (intention, mental state, religious framework), the setting (nature, community, vibe), or the drug and drug effects (relationship to the drug for spiritual use), they are all constantly reconfigured within each experience. This reconfiguration then further influences subsequent experiences after that. This section examines these reconfigurations and resulting chemosocialities to identify the necessary components for a transformative experience.

Reconfigured Socialities with Context

The drug, set, and setting come together in dynamic ways that result in new relationships with each other and introduce new elements, such as liminality, absorption, and pleasure. People form new relationships and practices with drugs. For example, some participants' perceptions of psychedelics shifted from being party drugs to having spiritual meaning and practices. In Helen's case, her earlier psychedelic experiences focused on having fun and partying. After multiple experiences and new religious perspectives, her practice steers toward healing and spiritual experiences. Florence has a similar story, where she started taking psychedelics to party, and over time her relationship changed using them in more spiritual ways. Wade also recognizes that

some drugs, like powdered drugs, feel less spiritual than others. These experiences changed his relationship with what drugs he takes and when he takes them based on his intention. This chemosociality is also evident in ascribing faith to an experience that can elicit a meaning response.

Participants note new relationships with the set or their self-identity and mental state. For example, Jillian's experience formed a new relationship with herself where she recognized, "I don't need society's approval to love myself. I can love myself just as I am." Floyd is another example. Through his experience and use of psychedelics, he reconfigured his self-perception. He stopped defining his identity by adult onset epilepsy. This new relationship gives him an appreciation for waking up daily. He also developed the "emotional fortitude to not be a victim even when you have every excuse to do so." In this process, he created a new relationship with himself and his condition, realizing that adult onset epilepsy is challenging. However, there are much worse things that he could be dealing with.

New relationships with the setting can be with the physical environment or within social groups. Having more profound and pleasurable experiences within nature can fortify new connections with the physical environment and inform other relationships. For example, Prudence found her way to Paganism from Catholicism after a renewed connection to nature during a psychedelic experience. New social relationships emerge from contributing to and becoming part of the collective community and vibe. The vibe is a new social and communal relationship built from the pleasure of multiple and individual experiences shared between everyone at music festivals.

Transformed Socialities

There are parallels between what transformation looks like in recent clinical and recreational studies compared to this project's results. Clinical studies see positive-experience outcomes related to a variety of mental health ailments, including anxiety and depression associated with life-threatening diseases, treatment-resistant depression (TRD), post-traumatic stress disorder (PTSD), substance use disorders, obsessive-compulsive disorder (OCD), social anxiety related to autism, and increased creativity (Costa 2022; Wheeler and Dyer 2020). This study found similar outcomes related to substance use disorders, depression, and anxiety. Some of these relatable outcomes may stem from similar descriptions of experiences. For example, clinical studies highlight joy, love, ineffability, self-compassion, feelings of connectedness and acceptance of emotions and reduced symptoms of depression, improved self-awareness, desire for engagement in new activities, and enhanced quality of life as being connected to the positive outcomes of patients (Barone et al. 2019; Belser et al. 2017; Carhart-Harris et al. 2016; Malone et al. 2018; Swift et al. 2017; Watts et al. 2017). Recreational studies describe similar feelings, including happiness, joy, peace, self-empowerment, ecstasy, euphoria, bliss, unity and oneness, increased openness and connections to people, creativity, and spirituality (Bøhling 2017; Hunt et al. 2007; Hutson 1999, 2000; Kavanaugh and Anderson 2008; Lynch and Badger 2006; Malbon 1999; Moore and Miles 2004; Redfield 2017; Sylvan 2005; White et al. 2006). Participants in this study convey similar feelings that resonate in the current literature, like joy, connectedness to themselves and the universe and nature, self-awareness, introspection, love, creativity, empathy, and ineffability. These experiential feelings contribute to overall positive outcomes like increased empathy, improvements in mental health, increased positive life outlook, overcoming

addiction, finding purpose in life, making new career paths, and spiritual transformations that resound with clinical studies.

Three findings are unique to this study compared to other psychedelic studies. First, psychedelic therapy typically steers from using psychedelics with patients with a family history of psychotic disorders like schizophrenia. Biomedicine takes this precaution to prevent the disorder from expressing itself after a psychedelic experience. In contradiction to this, one research participant, Jade, has schizophrenia and uses psilocybin regularly. She explained how her experiences with psilocybin helped her understand her mental health better. While under the influence of psilocybin, she understands that the visual alterations she experiences are a product of the psychedelic experience. In everyday life, she constantly questions if the reality she is experiencing is a product of schizophrenia or is accurate. For her, psychedelics, specifically psilocybin, help her feel more comfortable and allow her to gauge reality versus schizophrenic hallucinations in everyday life. It gives her the confidence to feel normal. Besides early psychedelic studies in the 1950s and 1960s, clinical research has avoided examining the potential relationship between psychedelics and psychotic disorders. Jade's recreational experiences illuminate that there may be a need for further examination on this topic.

Second, understanding the impacts of psychedelic experiences on creativity are inconclusive. This research shows that many participants identified increased creativity during and after their experience and a more profound desire to express that creativity. Two survey participants identified a reconnection to creative outlets. One of them started creating and selling art as a second job. Additionally, Isaac used art during and after his experience to process it. He continues to engage in new creative outlets. This finding speaks to how creative outlets during

and after the experience are beneficial and the potential of such experiences to instigate enhanced creativity.

Third, the impact of psychedelic experiences on solidifying or changing religious and spiritual perspectives is missing from current literature. Griffiths et al. (2008) highlight that study participants ranked mystical experiences as one of the top spiritually-significant experiences in their lives. However, they do not speak to how these exceptional experiences can result in shifts in religious or spiritual frameworks and practices. This research found that some participants shifted their frameworks from one religion, often Christianity, to another, more generally spiritual one. Others implemented remnants of their past religious frameworks into their new spiritual constructions. At the same time, others found reinforcement in their current religious ideology. Like the other contextual elements of chemosociality, religion is reiterative and co-constitutive with additional features. Religion is a framework that people use to make meaning out of their life and answer questions about life's purpose. As participants describe, psychedelics break down structural barriers in the mind and open them, allowing the exploration of new thoughts and ideas. It is a merging of the neurological and pharmacological effects of psychedelics with religious frameworks to answer questions like the purpose of life and what happens in death. Early psychedelic experiences exploring these questions inform later experiences, making them reiterative and co-constitutive. Ruth is an example of this continuous process. Growing up, her family was religious, and she was too. During an early psychedelic experience, she became overwhelmed by religious symbology and visualizations. Through contemplation and subsequent experiences, she questioned and reframed her religious beliefs.

Another parallel between clinical studies and this research is defining transformative. Participants in this study described it using two components: a shift in internal processing and a

change in everyday actions, thoughts, or behaviors. Current literature aligns with these two components but uses different terms. In relation to shifting internal patterns, Brouwer and Carhart-Harris (2021) describe this process as narrative self-functioning. This framework creates productive stories and beliefs about ourselves and impacts our concept of who we are and who we want to be (Amada et al. 2020, Amada and Shane 2022; Gallagher 2013; Letheby 2017). Maladaptive narrative functions are “defensive, avoidant, anxious patterns of thought and behavior” that limit the ability to achieve higher states of well-being (Amada and Shane 2022:3). Being able to exchange maladaptive narrative functions for narrative self-functioning is essential for improving well-being. Narrative self-functioning is evident in my data through participants who had drug addictions. They recognized that they were not the person they wanted to be and envisioned a new life away from their problematic drug use patterns. For Kira, this moment came when she thought, “I need to do something about this drug problem.” Brooke had a similar shift in her self-narrative when she realized she had dreams and goals, and the only way to achieve them was to overcome her addiction. Roman did not have a drug addiction but experienced a similar shift in his beliefs about himself by recognizing characteristics he no longer wanted to embody. Oscar directly speaks to Brouwer and Carhart-Harris’ (2021) narrative self-functioning when explaining that people create narratives of meaning and that by shifting one’s narrative, they also shift their personal meaning.

Brouwer and Carhart-Harris (2021) argue that the shift to narrative self-functioning occurs through self-transcendence, such as ego dissolution or mystical experiences. They find that losing oneself is an essential part of the transformation process in stripping oneself of a set of narratives to rewrite a new collection of narratives (Amada and Shane 2022; Brouwer and Carhart-Harris 2021). My research is inconclusive of this finding. In some instances, participants

did have mystical experiences or ego dissolution. Of the 312 participants who completed the Mystical Experience Questionnaire (MEQ), only 130 scored having a mystical experience compared to 182 who did not. This result is interesting because “Connection to the universe or feelings of oneness” was the most salient factor contributing to participants’ transformative experiences ($S=0.002110$), and “ego dissolution” was the second most salient factor ($S=0.002088$). These two factors relate to mystical elements, and the mystical subscale statements of the MEQ attempt to capture them. However, a majority of participants did not score having a mystical experience. Although participants did not score having a mystical experience on the MEQ, it does not mean the experience did not have meaning for them. An overwhelming 83.10 percent of participants responded that their reported transformative psychedelic experience continues to impact them. Whether participants had a mystical experience or not, all participants identified as having a transformative experience. These results suggest three things. First, other external mechanisms exist outside of ego dissolution and mystical experiences that allow people to shift their narratives or introduce new patterns leading to impactful or transformational change. Second, there is a distinct difference in the definitions of a mystical and transformational experience. The MEQ defines mystical experiences in one way. Participants define a transformational experience as different from a mystical experience. However, it may or may not contain similar elements of a mystical experience, such as ego dissolution or feelings of oneness. Still, the MEQ does not capture a transformative experience. Third, measuring meaningful change through mystical experiences may be too narrow to capture the essence of significant change to people. Another subscale that is context specific, such as for festivals or ceremonial practices, and the roles of those contextual factors in the experience can capture additional meaningful elements.

Finally, Brouwer and Carhart-Harris (2021) speak about making meaning out of impactful psychedelic experiences. Brouwer and Carhart-Harris (2021) identify integration as a pivotal piece of the meaning-making process after experiences. Much like the other stages explored by Brouwer and Carhart-Harris (2021), my research exemplifies the importance of integration to participants in making transformative meaning from their experience. Participants integrate their experiences in different ways. Some people speak to friends and family about the experience, like Floyd working through his experience with his brother. Others use art and creative expression to work through it, like Isaac creating his fisherman painting and Florence designing and getting symbolic tattoos. Others, like Roman and Helen, use meditation and journaling. Still others, like Olivia, seek support from a trained therapist. In any case, participants find ways to make meaning out of their experiences.

What makes these examples unique is that many speak to the diversity of ways people integrate their experiences. In the clinical setting, integration typically involves meeting with a therapist after the experience and continuing talk therapy. These examples show a diversity of ways to work through such experiences that may or may not be coupled with clinical frameworks. Additionally, action is another piece missing from Brouwer and Carhart-Harris' (2021) framework. Participants in my study engaged in specific actions resulting in changes in their everyday life. The literature on integration focuses on making meaning, but the findings from this study highlight what applying that new meaning looks like to result in transformation. That transformation can be physical, like eating healthier and exercising. It can be spiritual, like the survey participant who is more deeply connected to Christianity and prays daily. It can also be mental, like Roman practicing meditation and using it to recognize and redirect negative self-

thoughts. These enacted practices identify an extra step in integration beyond meaning-making by embodying everyday change.

Entanglements and intra-actions between the drug, set, and setting collide, resulting in chemosocialities in the form of transformative selves and relationships. People engage with psychedelics as chemical elements of their environment within the music festival scene. This chemical reaction complexly intertwines with the mental state, intention, trauma, artistic playgrounds, natural landscapes, and social setting. Each new chemical fusion and contextual entanglement reconfigures each element's definition and meaning with the experience. Some of the necessary elements to consider in creating transformation from psychedelic experiences are ascribing meaning to the psychedelic and the experience, enhancing elements of the setting through physiological psychedelic effects, experiencing pleasure through liminality and absorption, participating in structured rituals that promote introspection, contemplation, and integration, and relying on supportive and therapeutic community groups. Although none of these elements wholly support transformative experiences, they each contribute seeds that sprout new and emerging life into the world. These new life forms are chemosocialities, transformations of the self, and their relationship to the rest of the world. New ways are unrecognizable from what existed before in these dynamic chemical reactions. For participants, this means transformative life change in their everyday lives and within the social lives of all things.

A Reflection on Conducting the Chemoethnography of Recreational Psychedelics

With the successful completion of this research, I would like to reflect on the lessons learned from researching recreational drug use. There are two essential things to recognize when

investigating this topic. First, drug use, in general, is socially and culturally stigmatized. Second, many recreational drugs are illegal. Combining these considerations makes for a turbulent environment for conducting research. On the one hand, many community members express their gratitude for someone doing this work and appreciate that someone cares enough to listen to and respect their experiences. However, on the other hand, many people fear the social and legal repercussions of coming out about their drug use. As a researcher, it is pertinent to consider how one's positionality becomes situated within this turmoil and how to navigate it. Experiential anthropology was a guiding framework for me to think about this challenge throughout the project.

Anthropology asks us to consider the everyday lives and experiences of our participants. One way to do this is through experiential anthropology. Experiential anthropology requires the researcher to "go native" by fully experiencing the lives of another culture through participation (Linguist 1995:75). This practice includes being a full member of the study community and recognizing the researcher's role as a co-producer of data (Anderson 2006). In the context of drug use, Hunt and Barker (2001) argue that it is impossible to understand alcohol and drug cultures without engaging in the culture of those lived experiences. When studying people who recreationally use drugs, Takahashi and Olaveson (2003) recommend "talking to ravers and raving oneself, so that the investigator has a shared experience with those who rave" (74).

In my research, I did everything I could to fully engage in the culture and music festival scene. I attended workshops, went to silent discos, socialized with strangers, danced, practiced flow arts, and interacted with art. It is also important to note I have been part of the music festival community for about three years before starting this research. I engage in these activities in my free time and am deeply engrained in the music festival and psychedelic culture. As

outlined in the first chapter of this dissertation, I also have a deep relationship with psychedelics. They have played a significant role in my young adult life in shaping who I am and directing me to do this research. This recognition of my relationship with psychedelics and within this community is essential to understanding how that influences the data I collected and how I analyzed it. While I have these experiences, I also want to recognize that this research is not autobiographical. The observations are my experiences, but they are not the central focus of the study. I understand how my experience impacts my positionality. Still, the stories conveyed in this dissertation are solely those of the research participants, and I do not claim any of them as my own unless specifically stated.

To some, my deep participation in these activities and the community presents questions about the validity of my data. At the same time, engaging in festivals to this degree helped build rapport and gain invaluable insights from the experience and data. Additionally, with doing recreational drug research, I think it is essential to reflect on the benefits and risks of researchers participating in drug use as a form of experiential anthropology.

Building Rapport

Rapport is the process of building trust with research participants (Bernard 2011). Building these relationships is vital for gathering accurate and detailed data (Oswald et al. 2014). When studying stigmatized and criminalized populations, like people who actively use drugs, it is essential to build rapport to gain access to the study population, especially with fears of undercover law enforcement (Pawelz 2018). Participating in the study community builds rapport with participants by establishing knowledge and practice of the study population's body language, slang, and cultural cues (Jacobs-Huey 2002; Page and Singer 2010). In my experience,

I was an active member of the festival community before conducting research which provided me with established rapport and made recruitment easier.

I went into the project knowing how to act, dress, and speak to gain the trust of community members. I understood gift-giving practices and shared my own gifts as a community member. My friends told other friends about my project and shared my research flyer. At the same time, I had less rapport in the online communities, which made a difference in how people interacted with me. Someone recommended I join an online platform specifically related to all things psychedelic. There is no regulation on what people can post. I joined the group, and my first post was a big mistake. I posted my research flyer asking for participants. I received backlash from the other community members because I did not take the time to integrate into the community. To them, it felt like I burst into the community expecting something from them without even introducing myself first. It was a moment of culture shock. The lesson is that building rapport in all forms of the community is essential.

Acceptance into the community can also reduce the Hawthorne Effect. The Hawthorne Effect is when people change their behavior, knowing they are being observed or studied (Oswald et al. 2014). If participants know the researcher is watching them, they may change their behavior, impacting the collected data. Practicing experiential anthropology can blur the boundaries between being a researcher and a community member (Jacobs-Huey 2002). This dissolving of social boundaries can challenge the Hawthorne Effect because participants view the researcher as a community member, meaning they are less likely to recognize when researchers observe them and alter their behavior. I realize I have a deep connection to the community, but my presence may have still impacted how people interacted with me and the data I collected. During observations, participants may have recognized me from recruiting, other events, or my

online presence and changed their behavior. During interviews, participants may have withheld insightful details of their experiences based on the assumption that I fully understood the details of psychedelic experiences, creating a gap in the data. While being a community member and having rapport is essential to be accepted in the community, being known as a researcher hinders the type of data collected.

Gaining Invaluable Insights

After participating in festivals, I spent a lot of time writing field notes that provided detailed descriptions of the things I observed, experienced, and learned. Part of this process included reflecting on how the activities I participated in related to the topics and themes in the interviews and the literature on recreational drug use. Combining reflection with experiential practices was essential for me to gain insights into the research findings that I might not otherwise have had. For example, my experience at the silent disco, detailed field notes, and personal reflection revealed and solidified the contextual relationship between dance and music that I use as a metaphor for understanding the relationships between contextual elements like the drug, set, and setting. If I had not participated in that activity, my conceptualization of these entanglements would be different. Another insight I gained from community participation was the parallels between psychedelic-assisted psychotherapy and psychedelic experiences at music festivals. This revelation comes from watching people in their everyday patterns of taking drugs. While at festivals, I noted how my friends and others took their drugs and what they did while on them. I observed them and then asked them questions about their experience to understand what happened while they were quiet and introspective and what happened when they shared those experiences with others. Being at the festival, seeing the music, camping with my friends, and

accessing the community to ask those questions was invaluable to gaining that insight for that comparison. Reflection and experiential anthropology were core pieces to working through the data while simultaneously being immersed in it.

Engaging in Drug Use

A characteristic of experiential anthropology is engaging in drug use to understand drug experiences. One debate in this approach is the risks and benefits of researchers' drug use practices. Sandberg and Copes (2012) argue that ethnographic research undervalues drug use by researchers (185). This perspective argues that drug researchers cannot fully comprehend lived drug experiences without ever having them. Like my experiences in gaining a deeper understanding of the context of music festival experiences, it can provide similar insights to the psychedelic experience. Furthermore, drug use looks different for every researcher. Some researchers use it privately, while others use drugs with participants (Sandberg and Copes 2012). It is also possible to argue that researchers can still acquire valuable data without participating in drug use.

In the debate, there are discussions about whether researchers should “come out” about their drug use (Ross et al. 2020). Researchers who are open about drug use include Magdalena Harris, Walter Benjamin, Jean-Paul Sartre, Michel Foucault, Gilles Deleuze, Alexander Shulgin, Timothy Leary, Aldous Huxley, Sigmund Freud, William James, Friedrich Nietzsche, and Howard Becker. One of the benefits of being open about drug use is a shared sense of trust and rapport with participants (Palmer and Thompson 2010). Even if the researcher does not engage in drug use with participants, having a shared understanding of the experience is valuable. For example, people who use psychedelics characterize mystical-type experiences as indescribable.

However, it is impossible to understand this experience without engaging in it oneself, so having shared knowledge of a mystical-type experience helps the researcher understand the ineffable nature of such experiences (Harris 2019; James 1902). This commonality of shared experience is essential because “when you see and experience what they do to some extent – when you *feel* your data – you are closer to accurately representing it” (Briggs 2015:310 emphasis original).

At the same time, an affinity assumption between a researcher’s experiences and those of a participant creates challenges. First, the psychedelic experiences of a researcher might not be relatable to a participant’s experiences even if they used the same substance. In this way, the researcher can never fully comprehend the subjective nature of a participant’s experience. For this research, I did not use experiential anthropology to understand each specific aspect of a participant’s experiences but instead to relate to it on a broader level. For example, I can understand the primary biological effects of psychedelics, like the concept of open- and closed-eyed visuals or a heightened sense of touch. I cannot comprehend the distinct visual experiences of participants or the unique sense of touch, but I can relate to the concept of experiencing sensory changes. Second, sharing personal psychedelic experiences with participants may impact the data collected. Participants may leave out critical details of their experience in interviews, assuming that the researcher knows the experience. This example is where researchers with no experience with psychedelics may collect better data because there is no assumption that they know anything about the participant’s experience.

Researchers who participate in drug use must decide whether to be open or private about their use. Some things for researchers to consider before coming out are who they are coming out to (academic peers or participants), what they are coming out about (injection drug use or medical cannabis use), who is coming out (a tenured professor or a young researcher), and

identity characteristics (race, class, gender, and ethnicity) (Ross et al. 2020). Benefits of coming out include building rapport and gaining access to hard-to-reach populations, understanding the cultural factors of the study population, convincing political stakeholders to reconsider conceptualizations of people who use drugs, and reducing the stress of identity expression during research activities (Adler 1993; Blackman 2007; Ross et al. 2020; Thornton 1995). Risks of coming out include legal ramifications, academic and criminal stigmatization, devaluation and discrediting of research, and profiling and monitoring by law enforcement (Ross et al. 2020). Coming out about drug use is a personal and challenging decision. When asked about personal drug use, Charles Grob explains the dilemma, “I’m damned if I have and I’m damned if I haven’t. If I have, then my perspective would be discounted due to my own personal use bias, and if I haven’t it would be discounted because I would not truly understand the full range of experience the drug can induce” (Avni 2002: n.p.). This quandary is something everyone who does drug research must consider. As mentioned, being open about drug use creates academic, legal, and social risks. At the same time, not being open about it or not participating in drug use delegitimizes the researcher’s ability to fully grasp the experiences their participants share with them.

Experiential anthropology was a valuable framework for me to conceptualize the profoundly complex nature of contextual entanglements that play a role in psychedelic experiences. Diving into the psychedelic and music community established me as a respected and valued community member, which provided me with trust and rapport for gaining access to participants. Reflecting on these experiences also granted me preferential knowledge and comprehension that I might not otherwise have without participating in the community, which ultimately contributed to some of the more prominent findings of the study. By engaging in

experiential anthropology, I also had to navigate considerations on engaging in drug use and the benefits and consequences of being open or private about any potential use. Experiential anthropology may not be the framework for every researcher to use for recreational drug research. When deciding how to do this kind of research, the things to consider are how to gain access to vulnerable and stigmatized communities, engage with the community and various drug and non-drug-related activities, and conceptualize one's positionality among a community of people who use drugs.

CHAPTER 10:

CONCLUSION: A RECIPE FOR STUDYING CHEMOSOCIALITY

Summary of Main Findings

In this dissertation, I expand on the application of chemoethnography from environmental studies by integrating chemosociality into therapeutic and recreational drug use practices.

Existing literature on recreational drug use is limited. In some cases, it mentions the role of the drug, set, and setting but fails to comprehend how the context of drug use relates to experiential outcomes. Chemoethnography provides a framework for expanding this research to understand how these elements coalesce in dynamic entanglements within the unique setting of music festivals. Psychedelics merge with nature, constructed psychedelic worlds, mental states and moods, and social and cultural perceptions of drug use through processes of intra-action. From this, people form new social relationships with drugs, set, setting, themselves, and their essence of being in the world. Essentially, festivalgoers use psychedelics as a catalyst for change by reorienting their position within physical, social, mental, and emotional constructs.

As I emerge from my journey down the rabbit hole into the curious psychedelic lands that are music festivals, I have discovered answers to the three research questions I posed in chapter one. Question 1, *what are music festivals' most prominent contextual elements that contribute to transformative psychedelic outcomes?* As the literature suggests, the foundational components of drug experiences are the drug, set, and setting. Each component has situational meaning within the context of recreational psychedelic use at music festivals. Overall, participants did not

identify the drug as the most prominent factor contributing to their transformative psychedelic experience. At the same time, narratives did reveal the value and often sense of pleasure created by the physiological effects of psychedelics as they remove barriers of everyday constructs and allow people to engage in alternative worlds of reality at music festivals. The physiological effects of psychedelics go beyond the senses of sight, sound, touch, taste, and smell. Participants speak to experiences that dynamically entangle physical, emotional, and mental sensory perceptions, like seeing music, connecting feelings of absolute love to others and the universe, and experiencing time distortion. Psychedelic effects are more than simply conveying perception changes through the five senses. They are a complex amalgamation of physical, emotional, and mental perceptual experiences.

Hartogsohn (2020) argues that there are two levels to the set and setting. Participant narratives speak to these two levels. The first level is that of the individual. This included past trauma, unrequited love, a history of substance use, and unresolved grief in participant narratives. These situations are individual level hardships that influence the mental state going into a psychedelic experience. The second level is that of social and cultural influence. Many biomedical perspectives fail to recognize this secondary level to the set. Again, participant stories highlight the essential role of this additional construct in the set. Cultural frameworks, such as religion, that regulate acceptance or stigmatization of drug use are profoundly impactful factors. For example, exposure to stigmatized views on drug use can create self-doubt and questioning or negative thought patterns during experiences resulting in fear or guilt during an experience, as was the case with Ruth. Alternatively, culturally supportive perspectives on drug use can influence insightful, fun, and pleasurable experiences, such as participants who entered the experience with positive expectations influenced by mainstream media or those who enacted

spiritual frameworks that align with altered states of consciousness or consciousness exploration. Concerning the set, this study reveals the essential value in understanding not just the individual level of the set but the larger social and cultural constructs that influence people's mindsets before going into a psychedelic experience. Much like the set, this study identifies that the setting of drug use extends beyond the immediate physical and environmental context of the experience.

Biomedical research limits the scope of setting to controllable therapy-set standards. The music festival expands on this role of the setting to include interaction with the environment through the creation of "technoaesthetics." It presents opportunities to move and engage with the environment in ways the clinical setting does not allow, such as interactive art, total immersion in nature and live music, and freedom of movement in self-expression through dance and flow arts. Participants also identify the essential piece of the community setting. Social support is crucial for moments of uncertainty, contemplation, and hardship before, during, and after the experience. A lack of social support during the experience can leave people uncomfortable and prone to a "bad trip," and after the experience could result in the inability to integrate the experience fully. The communal "vibe" of music festivals provides a unique social environment, unparalleled within the biomedical model and potentially on par with communal psychedelic practices in indigenous communities. It calls for a deeper understanding and application of social connection to enhance therapeutic outcomes of psychedelic experiences in all settings.

Question 2, *how do the contextual elements of music festivals converge to create transformational experiences for participants at music festivals?* Elements of the music festival come together through entanglements of the music festival context and experiences of pleasure. The drug and set and drug and setting coalesce differently, but the true form of entanglement

comes when the three elements merge. Drugs create physiological effects, the set establishes the mental state, and the setting provides the physical and social environment. None of these elements alone create a psychedelic experience. As Glenn states, it is a specific recipe, a chemistry between these assemblages, that work together to create such experiences. At the same time, the recipe or chemical reaction is never repeatable. There is no set drug dose, recreated sunset, or replayed live performance. It is a somewhat spontaneous and uncontrolled intra-action occurring when all the elements align. Biomedical studies try to calculate the formula for creating meaningful experiences. If this study reports anything, it is that there are an infinite number of ways that context comes together to create an experience. Despite the unpredictable and uncontrollable festival environment, there is, to an extent, a pattern that dictates drug use practice and experience. One of the most illuminating pieces emerging from this dissertation is how the flow of the festival is a pattern that mimics the structure designed for psychedelic-assisted psychotherapy. It provides moments of internal contemplation followed by community-supported integration. The parallels speak to the potential to support the therapeutic and beneficial use of psychedelics in recreational settings. It provides a counter-narrative to the hedonistic pleasures of escaping reality through recreational drug use.

Furthermore, pleasure as a process of intra-action functions as a mechanism to understand the entanglements of how the music festival is a structured space for meaningful psychedelic use. In one way, the experience of liminality functions as intra-action. Escaping everyday life to experience an otherworldly reality is pleasurable to people. It also reorders the place of oneself within the entanglements of context. The reordering of entanglements and practices of psychedelic use provide opportunities for pleasure in the experience to enhance what people do, their spaces, and their embodiment of the experience. The intra-actions of the drug,

set, and setting provide a complete journey of the mind through the physiological effects of the psychedelics and the physical and social environment with movement and interaction within it. From it comes meaningful experiences.

Question 3, *what does transformative mean within the context of psychedelic experiences at music festivals?* Participants describe transformative in two parts. First, it requires a shift in one's internal processing patterns. Second, it requires some type of change in everyday life. The clinical definition of transformation is similar in that it relates shifting through patterns with "narrative self-functioning" (Brouwer and Carhart-Harris 2021). It also recognizes the role of integrating the experience as part of making meaning out of it. At the same time, the clinical definition relies on the process of self-transcendence or mystical experiences and fails to acknowledge any actionable change in everyday life. The Mystical Experience Questionnaire (MEQ) measures only one kind of psychedelic experience and misses out on the possibility of other types of meaningful experiences. It also does not account for the complex entanglements of context in experiences. Thus, this study found that most survey participants did not qualify for having a mystical experience. However, their reported experiences are significant. Additionally, although participants did not score as having a mystical experience, their narratives of transformation resonate with the therapeutic outcomes of those documented in clinical studies. These outcomes include improving mental health and self-image, overcoming substance use disorders, and enhancing one's outlook on life. This study also found transformative to mean finding life purpose, following new career paths, and spiritual transformation.

Ultimately, this research shows that this unique otherworldly context provides a structured environment for freedom to explore one's consciousness despite stereotypical notions of hedonistic pleasure in drug use and engagement of escapism to music festivals. The rhythmic

beat of the festival scene creates space for internal reflection while cultivating supportive community vibes to process and integrate psychedelic experiences. From these entanglements emerges similar transformative outcomes comparable to those described in clinical settings. This dissertation provides rich evidence for supporting the powerful transformative nature of recreational spaces for therapeutic psychedelic use. From it comes the opportunity to expand current academic literature, suggest future avenues for inquiry, and enhance clinical study and practice of therapeutic psychedelic use.

Contributions to Anthropology

This dissertation profoundly innovates chemoethnography by pushing the boundaries of recreational drug use studies and chemoethnography to birth the chemoethnography of psychedelics. Current literature exists on the context of drug use with a focus on the individual parts of the drug, set, and setting. Through this project, I fill a void in current studies by placing the human and chemical interaction in situ with the context of drug use practices to gain a holistic understanding of these experiences. Furthermore, my engagement with chemoethnography builds a new theory of it, pulling on multiple fields of study to envelop them within the anthropological inquisition. In doing so, I developed a social science formula or recipe for understanding the relationships and processes that converge between humans and chemicals:

$$\text{Assemblages} + \text{entanglements} + \text{intra-action} = \text{chemosociality}$$

In this recipe, the music festival enables and constrains what elements (assemblages) are present in the context of the experience. The presence or absence of these pieces determines what patterns (entanglements) of these elements can emerge within each experience. How these patterns form between the pieces determines how the process (intra-action) of the experience

manifests. How the process manifest and are then experienced results in the product of a specific chemosociality. Each piece of the chemoethnography of psychedelics builds from and relies on the preceding components. This theoretical framework operationalizes chemoethnography between its parts and generates a methodology to expand future drug research to 1) consider the context as an essential factor contributing to drug experiences and 2) examine, understand, and deconstruct the complex relationships of drug use and context.

Additionally, building a chemoethnography of psychedelics expands on threads in environmental anthropology. The chemoethnography examines human chemical relationships outside physical environmental contexts and merges them with mental, social, and cultural environments. Ultimately, this application expands the definition of the environment to include all contextual elements of human experience. As environmental anthropology engages with other fields of study and broadens the realm of environmental research, it can refer to the chemoethnography of psychedelics to contemplate multiple contextual aspects of the environment in understanding human-chemical relationships.

Chemoethnography is also a valuable framework for advancing an “anthropology of the good” by merging socio-cultural contexts, like the set, setting, and practice, with pharmacological effects of medicine, like sensory experience, to develop new theories of recovery. For example, future studies can use chemoethnography to consider how social connectedness and self-expression activities, like dance and art, in medical and non-medical settings enable diverse patient experiences that promote therapy and healing. Another opportunity is using chemoethnography to promote interdisciplinary research that bridges biomedical and anthropological perspectives to advance knowledge on medical and non-medical modes of healing.

Along with promoting an “anthropology of the good,” this dissertation contributes to medical anthropology's literature on community and healing. One of the significant findings is community support before, during, and after their psychedelic experiences. These social groups were essential to creating meaningful and impactful transformations for participants. Although non-medical contexts do not discuss therapy management groups, this study finds they are present in the context of recreational drug use. With a deeper understanding of the role of social groups and community in psychedelic experiences, this study resituates the role of therapy management groups to non-medical settings that revolve around treatment, therapy, and healing. Thus, opening opportunities to reconsider how therapy management groups function outside Western biomedical models and provide essential support in other forms of treatment. Through the implementation of chemoethnography to recreational psychedelic use, this study contributes to the literature on drug use practices, environmental anthropology, “an anthropology of the good,” and medical anthropology.

Limitations and Future Research

While this dissertation is exploratory research and leaves a lot to learn, its limitations, findings, and lessons provide direction for future research. First, this study is limited to examining the context of recreational psychedelic use. Future research can investigate other recreational contexts. For example, some participants mentioned taking psychedelics while camping or at a friend's home. These settings can provide contrasting data to the festival setting to further understand how context shapes meaningful experiences. Also, this study heavily relies on implicit comparisons to clinical applications. Future studies can examine clinical spaces of psychedelic use for comparable data. Second, some participants mentioned the positive effects of

microdosing psychedelics. For example, during an informal conversation, a DJ mentioned he microdosed for a recent set and felt more in tune with himself and the music during his performance. The scope of the study did not cover microdosing as a drug use practice. Future research should focus on the effects and experiences of microdosing in recreational environments and how the variation of doses differs amongst other contextual elements. Recent clinical examination of this practice provided inconclusive results on the effects of microdosing (de Wit et al. 2022). Another future avenue of research would be to consider the role of placebo as a contextual element in recreational settings and experiential outcomes. Third, sensory alterations related to taste and smell were limited in the study. There is also a limited exploration of this topic in psychedelic literature, despite evidence of other sensory changes. Future research can look more closely at these specific senses. Are taste and smell senses that become altered during these experiences? If so, how are they altered, and what contexts create particular alterations? Fourth, the unique differences between different classes of psychedelics beg further exploration. LSD, psilocybin, and MDMA/MDA target the 5H-HT_{2A} receptor, which regulates serotonin. Ketamine targets glutamate and GABA, explaining its more anesthetic properties. This study is limited in exploring how these chemical and neurological differences impact experiences and the context of their use but provides avenues for more in-depth research.

For the study's findings, one of the significant results is the crucial role of a supportive community as a contextual element of recreational psychedelic use. Considering this finding is only exploratory, future research must consider the intricacies of this factor. In particular, what is the extent of the community as an element of the set in these experiences? In what ways do social groups prepare people for experiences? What does a lack of social support during the experience look like, and how does it impact the experience? This exploration will provide a

deeper understanding of how the community is an aspect of the set. A result from the survey found no difference in demographic measurements, factors, and outcomes of the experience. Demographic characteristics were not a focus of the contextual elements of the study. Future research should consider if and how demographics factor into psychedelic experiences. The survey also did not find differences in the types of events, but in narrative interviews, participants mentioned differences between festivals with and without camping and single-day shows. Future research should consider how the contextual elements of music events differ between events and how those unique elements create different experiences. Much like the clinical research, this study found positive outcomes related to mental health. With the exploratory nature of this study, this was only a surface-level finding. Future research should create context-specific measurements for these outcomes. Collecting validated quantitative data along with qualitative descriptions can inform the effectiveness of recreational psychedelic use related to mental health. Additionally, the study found discrepancies in measuring mystical experiences and participant definitions of transformative. The MEQ is a limited measurement that leaves out the context of use and does not capture other types of meaningful psychedelic experiences. Future research can consider ways to adopt the MEQ for recreational contexts or develop additional measurements to investigate other definitions of meaningful experiences.

Recommendations and Applied Aspects

I present a few recommendations on how the findings of this dissertation can inform future clinical studies and practices. First, clinical researchers should consider incorporating different elements of the context into their studies instead of constantly trying to control for it. As this study finds, context is an essential attribute of psychedelic experiences and is an essential

consideration when examining experiential outcomes. They can consider employing a chemoethnographic framework to identify and explore potential contextual elements contributing to patient outcomes. For example, religious ideologies are an element of the set and the potential for experiences to shift religious or spiritual frameworks and how that impacts subsequent experiences.

Second, clinical research and practice should incorporate elements from the recreational setting. Since the community is an essential element across the psychedelic arc, studies and practices can design different community models at all stages of the therapeutic process. For example, incorporating frameworks from therapy management groups can help patients identify and build supportive social groups for their healing process. Also, practices should offer opportunities for community-based psychedelic experiences.

Another recreational facet to include in clinical settings is to allow patients to engage in various activities before, during, and after the experience. Again, the set plays a prominent role in the experience. If therapists have patients participate in workshops and other activities before the experience, it may inform intentions and experiences. An example is how Helen felt deeply connected to the oak trees surrounding her after a visualization workshop where she went underground below an oak tree to see guidance from her spirit guide. Workshops or activities can include sound healing ceremonies, cocoa ceremonies, visualization exercises, and flow classes. Also, therapeutic practice models and protocols should consider other activities during the experience, such as dancing, live music, visualization exercises, flow activities (hula hooping, poi), sound healing, meditation, singing, and different engagements with art. Also, since the setting plays such a pivotal role, practices should consider incorporating different physical environments, such as nature or meaningful spaces for patients. Finally, some of the noted

activities from recreational use can be available as methods of integration after the experience. For example, art was a valuable integration tool for Isaac. It gave him the creative expression to process his experience and visually represent its meaning. In addition, explaining it to me provided another opportunity to process the experience with someone else. Therapists can combine talk therapy with creative arts like storytelling, writing, playing music, and journaling. Therapists can also encourage patients to try different activities until they find one that helps them process their experiences.

Applied Aspects

I recognize three main applied avenues for the findings of this dissertation. First, the construction of chemoethnography and its application to recreational drug use generally informs future research on meaningful and transformative human experiences. This study used chemoethnography to examine transformative experiences within the context of psychedelics and music festivals. Future research can engage with this framework to identify and investigate the assemblages and mechanisms that create diverse lived experiences. It functions as a framework to identify the contextual pieces that come together in dynamic relationships to generate unique and meaningful experiences. It can apply specifically to recreational drug use, such as investigating how functional drug use, as discussed by Lende et al. (2007), happens in various settings. This framework also applies to understanding meaningful or transformative experiences from perspectives outside of drug use practices. For example, a chemoethnographic and chemosociality approach could expand Seligman's (2005) work on studying transformative experiences and healing in the context of Candomblé to learn more about the processes that produce these experiences. Research looking at other types of meaningful experiences, such as

mystical, religious, spiritual, traumatic, and healing experiences, could also benefit from applying a chemoethnographic approach.

The second avenue is to impact policy. Another way of advancing an “anthropology of the good” is to impact future drug policy and implementation in the United States. With increased decriminalization, medicalization, and legalization movements for various substances, this research has a responsibility to inform legislative language in these efforts. First, the language used in drug policy dictates availability and accessibility, so informing policy development in this way can aid in addressing issues of equitability and inequality related to substance use and practice. In studying non-medical practices and settings, this study can promote language in policy that protects these spaces by redefining what transformative means, what psychedelic practices look like, and what makes these experiences meaningful for people. This contribution is essential for policy not to exclude large portions of the population who use psychedelics outside medical settings. Such as informing policymakers of the diverse recreational practices, settings, and experiences to encourage legislative language that creates safe spaces where individuals are free to engage in psychedelic exploration without social and criminal repercussions. Second, this study aims to inform policy to promote harm reduction in recreational settings, such as making regulations and requirements about minimum harm reduction services available at different events where recreational drug use is common. These requirements can be as simple as providing access to free water at events. It can also look like having festivals develop a proactive plan offering peer or professional support for people having challenging drug experiences. Some festivals offer these services. Having requirements about offering these services can establish comfortable settings for people to have experiences, give them a safe space if they need extra support or if they do not have a social support system at the

event, and reduce unnecessary contact with law enforcement which may enhance the difficulties of the experience. Third, I intend to use this research to support the dismantlement of the War on Drugs by advocating for the legalization of all drugs and supporting the redistribution of government funds from enforcement towards harm reduction and benefit maximization efforts. Available funds can support programs like clean needle exchanges, drug testing facilities, safe drug use sites, and research and programs to identify people with problematic drug use and provide access to evidence-supported wrap-around services and treatment. Additional funds can support research into clinical and recreational studies to understand the variety of ways people use drugs to continue informing and developing therapy and harm reduction services in any context of use. Until research and policy merge to create safe spaces for non-medical drug use, stigmatization and criminal penalties will continue oppressing the largest group of people who use substances. This dissertation provides evidence to shift these narratives by influencing policy and establishing safe and accessible opportunities for all kinds of drug use.

The third applied impact of the study is to inform future harm reduction measures. Using the findings relating psychedelic-assisted psychotherapy to the structure of music festivals, harm reduction organizations can understand more about the processes of psychedelic experiences within the context of music festivals. In knowing more, they can take lessons from this research and the clinical setting to develop creative harm reduction strategies based on the context of music festivals. For example, develop programs encouraging those without a support system to seek assistance. Another example is to develop creative campaigns to provide education and information to people at festivals that do not allow harm reduction services. Although harm reduction organizations may not be allowed at some festivals, they can send people to attend the festival and hand out information on services like Fireside Project, a live peer support helpline

for people during and after experiences. This harm reduction can assist people at festivals even when harm reduction services are unavailable. Harm reduction services can also offer training on how to be a peer supporter to others during challenging experiences. These tools can transcend current policies and practices that limit harm reduction services in recreational settings until legislation changes and becomes more supportive.

Enacting these impacts on research, policy, and harm reduction services requires sharing the findings from this dissertation. To do that, I plan on distributing these findings over various platforms to reach diverse audiences. In Spring 2023, I will be a guest on the Psychedelics Today podcast to share my research and will release an accompanying blog post to their online community. I also plan to submit manuscripts to multiple peer-reviewed journal articles and present my research findings at professional and psychedelic-related conferences. While conducting research activities, many participants expressed interest in reading this dissertation. I plan on sharing the dissertation, along with a two-page executive summary, with all participants and on all social media platforms I used to recruit participants for the study. Finally, I view this dissertation as an initial draft to the publication of at least two books on the findings from this study.

Final Thoughts

I started this dissertation by drawing readers into the curious rabbit hole of psychedelia and music festivals. Drawing on detailed descriptions of psychedelic experiences and otherworldly adventures, I use the components of chemoethnography to bridge the literature on drug practices, environmental studies, and medical anthropology to establish the chemosociality of psychedelics. Using this framework, I have discovered that transformative psychedelic

experiences are a complex web of contextual elements beyond the basis of the drug, set, and setting but also include social and cultural constructs. Psychedelic experiences are reiterative mirrors and products of peoples' life stories that reveal valuable insight and meaning. While music festivals seem like a world away from clinical applications, they provide a unique series of patterns that function as structures to guide people within the experiences in similar ways to the methods used in psychedelic-assisted psychotherapy. The narratives participants shared for this study highlight the value of meaningful experiences within this environment and the potential for healing and therapy. These meaningful experiences encompass a broad range of impactful life changes that expand beyond the scope of current clinical examinations and suggest new directions of inquiry. While this journey down the rabbit hole is coming to a close, it is not the end of the psychedelic voyage. It is only the beginning because I see this journey as a service to others who wish to share their stories while contributing to harm reduction and benefit maximization efforts and simultaneously creating new meanings of what it means to be human in the world. I also see it as a way of fighting the injustices promoted and underpinned by the War on Drugs and showing with evidence and by example that there are multiple modes of healing and therapy outside of clinical and biomedical models. As I emerge from the rabbit hole of psychedelic music festivals and integrate back into the patterns of everyday reality, I recognize that the end of this journey is not truly over. The lessons learned are new socialities, assemblages, entanglements, and intra-actions that will not fade away but act as a guiding light that informs and shapes future directions for the next journey down the psychedelic rabbit hole.

REFERENCES

- Abrahamsson, Sabastian, Filippo Bertoni, Annemarie Mol, and Rebeca Ibáñez Martin. 2015. "Living with Omega-3: New Materialism and Enduring Concerns." *Environment and Planning D: Society and Space* 33 (1): 4-19.
- Adler, Patricia A. 1993. *Wheeling and Dealing: An Ethnography of an Upper-Level Drug Dealing and Smuggling Community*, 2nd ed. New York: Columbia Press.
- Agro, Hilary. 2016. *Prohibited Practice: Drug Use, Harm Reduction, and Benefit Enhancement in Toronto Rave Culture*. Masters Thesis. Electronic Thesis and Dissertation Repository, The University of Western Ontario.
- Ahlam, Austin. 2022. "House Moves to Expand Psychedelic Therapy Research." *The Intercept*. www.theintercept.com.
- Alamia Andrea, Christopher Timmermann, David J. Nutt, Rufin VanRullen, and Robin L. Carhart-Harris. 2020. "DMT Alters Cortical Travelling Waves." *eLife* 9: e59784.
- Alasuutari, Pertti. 1992. *Desire and Craving: A Cultural Theory of Alcoholism*. Albany: SUNY Press.
- Albaugh, Bernard J. and Philip O. Anderson. 1974. "Peyote in the Treatment of Alcoholism Among American Indians." *American Journal of Psychiatry* 131: 1247-1250.
- Alexander, Michelle. 2010. *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*. New York: The New Press.
- Amada, Nicole, Toby Lea, Chris Letheby, and Jacob Shane. 2020. "Psychedelic Experience and the Narrative Self: An Exploratory Qualitative Study." *Journal of Consciousness Studies* 27 (9-10): 6-33.
- Amada, Nicole and Jacob Shane. 2022. "Self-Actualization and the Integration of Psychedelic Experience: The Mediating Role of Perceived Benefits to Narrative Self-Functioning." *Journal of Humanistic Psychology*: 00221678221099680.
- American Anthropological Association (AAA). 2012. *Code of Ethics of the American Anthropological Association*.
- American Civil Liberties Union of Pennsylvania. 2015. *Guilty Property*. www.aclupa.org.

- American Pharmaceutical Association (APhA). Annual Meeting. 1903. *Proceedings of the American Pharmaceutical Association at the Annual Meeting*. Vol. 51. The Association.
- Anderson, Leon. 2006. "Analytic Autoethnography." *Journal of Contemporary Ethnography* 35 (4): 373-395.
- Andreae, Michael H., Evelyn Rhodes, Tyler Bourgoise, George M. Carter, Robert S. White, Debbie Indyk, Henry Sacks, and Rosamond Rhodes. 2016. "An Ethical Exploration of Barriers to Research on Controlled Drugs." *The American Journal of Bioethics* 16 (4): 36-47.
- Antone, Robert. 2013. "Yukwalihowanahutu Yukwanosaunee Tsiniyukwaliho:t^ As People of the Longhouse, We Honor Our Way of Life Tekal^hsal^ Tsiniyukwaliho:t^ Praise Our Way of Life." PhD Dissertation. State University of New York at Buffalo.
- Argento, Elena, Rielle Capler, Gerald Thomas, Philippe Lucas, and Kenneth W. Tupper. 2019. "Exploring Ayahuasca-assisted Therapy for Addiction: A Qualitative Analysis of Preliminary Findings Among an Indigenous Community in Canada." *Drug and Alcohol Review* 38 (7): 781-789.
- Argento, Elena, Steffanie A. Strathdee, Kenneth Tupper, Melissa Braschel, Evan Wood, and Kate Shannon. 2017. "Does Psychedelic Drug Use Reduce Risk of Suicidality? Evidence from a Longitudinal Community-based Cohort of Marginalised Women in a Canadian setting." *BMJ open* 7 (9): e016025.
- Aronovich, Adam A. 2020. *Ayahuasca as Relational Medicine: Intimate Encounters at the Frontiers of Liquid Modernity*. Paper presented at the Interdisciplinary Conference on Psychedelic Research.
- Avni, Sheerly. 2002. "Ecstasy Begets Empathy." *Salon*. www.salon.com.
- Barad, Karen. 2003. "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter." *Journal of Women in Culture and Society* 28 (3): 801-831.
- Barad, Karen. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke University Press.
- Barbosa, Paulo Cesar Ribeiro, Joel Sales Giglio, and Paulo Dalgalarrrondo. 2005. "Altered States of Consciousness and Short-term Psychological After-effects Induced by the First Time Ritual Use of Ayahuasca in an Urban Context in Brazil." *Journal of Psychoactive Drugs* 37 (2): 193-201.
- Bargielski, Richard. 2020. *Field Brook Superfund Site: Race, Class, and Environmental Justice in a Blasted Landscape*. PhD Dissertation. University of South Florida, Tampa, FL.

- Barone, William, Jerome Beck, Michiko Mitsunaga-Whitten, and Phillip Perl. 2019. "Perceived Benefits of MDMA-Assisted Psychotherapy Beyond Symptom Reduction: Qualitative Follow-up Study of a Clinical Trial for Individuals with Treatment-Resistant PTSD." *Journal of Psychoactive Drugs* 51 (2): 199-208.
- Barrett, Frederick S., Matthew W. Johnson, and Roland R. Griffiths. 2015. "Validation of the Revised Mystical Experience Questionnaire in Experimental Sessions with Psilocybin." *Journal of Psychopharmacology* 29 (11): 1182-1190.
- Barthes, Roland. 1975. *The Pleasure of the Text*. London: Macmillan.
- Bateson, Gregory. 1972. *Steps to an Ecology of Mind: [a revolutionary approach to man's understanding of himself]*. Ballantine Books.
- Bateson, Gregory. 1979. *Mind and Nature*: 1-18.
- Bauer, Barbara E. 2019. "The Entourage Effect in Magic Mushrooms." *Psychedelic Science Review*. www.psychedelicroview.com.
- Baum, Dan. 1996. *Smoke and Mirrors*. Boston: Back Bay Books.
- Becker, Howard S. 1953. "Becoming a Marijuana User." *American Journal of Sociology* 59 (3): 235-242.
- Belser, Alexander B., Gabrielle Lgin-Liebes, Cody T. Swift, Sara Terrana, Nese Devenot, Harris L. Friedman, Jeffrey Guss, Anthony Bossis, and Stephen Ross. 2017. "Patient Experiences of Psilocybin-Assisted Psychotherapy: An Interpretative Phenomenological Analysis." *Journal of Humanistic Psychology* 57 (4): 354-388.
- Bennett, Jane. 2010. *Vibrant Matter: A Political Ecology of Things*. Durham, NC: Duke University Press.
- Berman, Robert M., Angela Cappiello, Amit Anand, Dan A. Oren, George R. Heninger, Dennis S. Charney, and John H. Krystal. 2000. "Antidepressant Effects of Ketamine in Depressed Patients." *Biological Psychiatry* 47 (4): 351-354.
- Bernard, H. Russell. 2011. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*, 5th Ed. Lanham: AltaMira Press.
- Berry, Joyce M. 2012. *Standing Our Ground: Women, Environmental Justice, and the Fight to End Mountaintop Removal*. Athens, OH: Ohio University Press.
- Bewley-Taylor, David and Martin Jelsma. 2012. "Regime Change: Re-visiting the 1961 Single Convention on Narcotic Drugs." *International Journal of Drug Policy* 23: 72-81.

- Biehl, João and Peter Locke. 2017. *Unfinished: The Anthropology of Becoming*. Duke University Press.
- Blackman, Shane J. 2007. “‘Hidden Ethnography’: Crossing Emotional Borders in Qualitative Accounts of Young People’s Lives.” *Sociology* 41: 699-716.
- Bloch, Stefano. 2018. “Place-Based Elicitation: Interviewing Graffiti Writers at the Scene of the Crime.” *Journal of Contemporary Ethnography* 47 (2): 171-198.
- Boas, Franz. 1930. *The Religion of the Kwakiutl Indians*. Columbia University Press.
- Boeri, Miriam Williams, Claire E. Sterk, and Kirk W. Elfison. 2004. “Rolling Beyond Raves: Ecstasy Use Outside the Rave Setting.” *Journal of Drug Issues* 34 (3): 831-859.
- Bogenschutz, Michael P., Alyssa A. Forcehimes, Jessica A. Pommy, Claire E. Wilcox, Paulo Cesar Ribeiro Barbosa, and Rick J. Strassman. 2015. “Psilocybin-Assisted Treatment for Alcohol Dependence: A Proof-of-Concept Study.” *Journal of Psychopharmacology* 29 (3): 289– 99.
- Bogenschutz, Michael P., Samantha K. Podrebarac, Jessie H. Duane, Sean S. Amegadzie, Tara C. Malone, Lindsey T. Owens, Stephen Ross, and Sarah E. Mennenga. 2018. “Clinical Interpretations of Patient Experience in a Trial of Psilocybin-Assisted Psychotherapy for Alcohol Use Disorder.” *Frontiers in Pharmacology* 9 (100): 1-7.
- Bøhling, Frederik. 2017. “Psychedelic Pleasures: An Affective Understanding of the Joys of Tripping.” *International Journal of Drug Policy* 49: 133-143.
- Boldt, Richard C. 2010. “Drug Policy in Context: Rhetoric and Practice in the United States and the United Kingdom.” *South Carolina Law Review* 62 (261): 261-351.
- Bourgois, Philippe. 2008. “The Mystery of Marijuana: Science and the U.S. War on Drugs.” *Substance Use & Misuse* 43: 581-583.
- Bouso, José Carlos, Eduardo José Pedrero-Pérez, Sam Gandy, and Miguel Ángel Alcázar-Córcoles. 2016. "Measuring the Subjective: Revisiting the Psychometric Properties of Three Rating Scales that Assess the Acute Effects of Hallucinogens." *Human Psychopharmacology: Clinical and Experimental* 31 (5): 356-372
- Briggs, Daniel. 2015. “Living Realities: The Importance of Ethnographic Drug Research.” *Drugs Education, Prevention and Policy* 22 (3): 308-310.
- Bronner, David, Kevin Matthews, and Ryan Munevar. 2020. “A Nuts & Bolts Discussion of Psychedelic Law Reform.” *Chacruna Psychedelic Liberty Summit*. Virtual.
- Brosterhus, Freya. 2022. “Self-Medication as a Social Action.” *Anthrometronom*. www.anthrometronom.com.

- Brouwer, Ari and Robin Lester Carhart-Harris. 2021. "Pivotal Mental States." *Journal of Psychopharmacology* 35 (4): 319-352.
- Brown, Thomas Kingsley and Kenneth Alpert. 2018. "Treatment of Opioid Use Disorder with Ibogaine: Detoxification and Drug Use Outcomes." *American Journal of Drug & Alcohol Abuse* 44 (1): 24–36.
- Brown, Thomas Kingsley, Geoff E. Noller, and Julie O. Denenberg. 2019. "Ibogaine and Subjective Experience: Transformative States and Psychopharmacotherapy in the Treatment of Opioid Use Disorder." *Journal of Psychoactive Drugs* 51 (2): 155-165.
- Broyles, Lauren M., Ingrid A. Binswanger, Jennifer A. Jenkins, Deborah S. Finnell, Babalola Faseru, Alan Cavaiola, Marianne Pugatch, and Adam J. Gordon. 2014. "Confronting Inadvertent Stigma and Pejorative Language in Addiction Scholarship: a Recognition and Response." *Substance Abuse* 35 (3): 217-221.
- Campbell, Morgan. 2020. "Can Psychedelic Therapy Reduce the Mental Health Impacts of the Coronavirus Pandemic?" *The Sacramento Bee*. www.sacbee.com.
- Carbonaro, Theresa M., Matthew P. Bradstreet, Frederick S. Barrett, Katherine A. MacLean, Robert Jesse, Matthew W. Johnson, and Roland R. Griffiths. 2016. "Survey Study of Challenging Experiences After Ingesting Psilocybin Mushrooms: Acute and Enduring Positive and Negative Consequences." *Journal of Psychopharmacology* 30 (12): 1268-1278.
- Carhart-Harris, Robin L., Mark Bolstridge, James Rucker, Camilla M. J. Day, David Erritzoe, Mendel Kaelen, Michael Bloomfield, James A. Rickard, Ben Forbes, Amanda Feilding, David Taylor, Steve Pilling, Valerie H. Curran, and David J. Nutt. 2016. "Psilocybin with Psychological Support for Treatment-Resistant Depression: An Open-label Feasibility Study." *The Lancet Psychiatry* 3: 619-627.
- Carhart-Harris, Robin L., Martin Fortier, and Raphaël Millière, R. 2017. "Psychedelics and Consciousness. An interview with Robin Carhart-Harris." *ALIUS Bulletin* (1): 1-16.
- Carhart-Harris, Robin L. and Karl J. Friston. 2019. "REBUS and the Anarchic Brain: Toward a Unified Model of the Brain Action of Psychedelics." *Pharmacological Review* 71 (3): 316–344.
- Carhart-Harris, Robin L. and Guy M. Goodwin. 2017. "The Therapeutic Potential of Psychedelic Drugs: Past, Present, and Future." *Neuropsychopharmacology* 42 (11): 2105-2113.
- Carhart-Harris Robin L., Robert Leech, Peter John Hellyer, Murray Shanhaan, Aamaanda Feilding, Enzo Tagliazucchi, Dante R. Chialvo, and David J. Nutt. 2014. "The Entropic Brain: A Theory of Conscious States Informed by Neuroimaging Research with Psychedelic Drugs." *Frontiers in Human Neuroscience* 8 (20): 1-22.

- Carhart-Harris, Robin L., Leor Roseman, Eline Haijen, David Erritzoe, Rosalind Watts, Igor Branchi, and Mendel Kaelen. 2018. "Psychedelics and the Essential Importance of Context." *Journal of Psychopharmacology* 32 (7): 725-731.
- Carlson, Robert G., Russel S. Falk, Jill A. McCaughan, and Harvey A. Siegal. 2004. "MDMA/Ecstasy Use Among Young People in Ohio: Perceived Risk and Barriers to Intervention." *Journal of Psychoactive Drugs* 36 (2): 181-189.
- Carod-Artal, F.J. and C.B. Vázquez-Cabrera. 2006. "Mescaline and the San Pedro Cactus Ritual: Archaeological and Ethnographic Evidence in Northern Peru." *Revista de Neurologia* 42 (8): 489-498.
- Carter, Jimmy. 1979. "President's Message to the Congress on Drug Abuse." *Strategy Council on Drug Abuse, Federal Strategy for Drug Abuse and Drug Traffic Prevention*: 66-67.
- Castaneda, Carlos. 1968. *The Teachings of Don Juan: A Yaqui Way of Knowledge*. University of California Press.
- Clifford, James. 1986. "Introduction: Partial Truths." *Writing Culture: The Poetics and Politics of Ethnography*, edited by James Clifford and George E. Marcus, 1-26. Berkeley: University of California Press.
- Cohen, Richard S. 1998. *The Love Drug: Marching to the Beat of ECSTASY*. Binghamton: Haworth Press.
- Collins, Randall. 2005. *Interaction Ritual Chains*. Princeton: Princeton University Press.
- Congressional Research Service. 2022. *Poverty in the United States in 2020*.
- Cormier, Zoe. 2019. "Psilocybin is Headed for the Mainstream – It's Bringing the Problems of Big Pharma with It." *Elemental*. www.elemental.medium.com.
- Costa, Miguel Ângelo. 2022. "A Dose of Creativity: An Integrative Review of the Effects of Serotonergic Psychedelics on Creativity." *Journal of Psychoactive Drugs*: 1-11.
- Coveney, John and Robin Bunton. 2003. "In pursuit of the Study of Pleasure: Implications for Health Research and Practice." *Health* 7 (2): 161-179.
- Cropley, Arthur. 2006. "In Praise of Convergent Thinking." *Creativity Research Journal* 18 (3): 391-404.
- Csikszentmihalyi, Mihaly. 1990. *The Psychology of Optimal Experience*. New York: Harper and Row.

- Daly, Max. 2017. "The Important Drugs Debate Question That Nobody's Asking." *Vice*.
www.vice.com.
- D'Andrea, Anthony. 2004. "Global Nomads: Techno and New Age as Transnational Countercultures in Ibiza and Goa." *Rave, Culture and Religion*, edited by Graham St John, 233–53. London: Routledge.
- Danforth, Alicia L., Charles S. Grob, Christopher Struble, Allison A. Feduccia, Nick Walker, Lisa Jerome, Berra Klosinski, and Amy Emerson. 2018. "Reduction in Social Anxiety After MDMA-assisted Psychotherapy with Autistic Adults: a Randomized, Double-blind, Placebo-Controlled Pilot Study." *Psychopharmacology* 235 (11): 3137-3148.
- Dao, Amy and Jessica Mulligan. 2016. "Toward an Anthropology of Insurance and Health Reform: An Introduction to the Special Issue." *Medical Anthropology Quarterly* 30 (1): 5-17.
- Davis, Alan K., Frederick S. Barrett, and Roland R. Griffiths. 2020. "Psychological Flexibility Mediates the Relations Between Acute Psychedelic Effects and Subjective Decreases in Depression and Anxiety." *Journal of Contextual Behavioral Science* 15: 39-45.
- Davis, Alan K., Frederick S. Barrett, Darrick G. May, Mary P. Cosimano, Nathan D. Sepeda, Matthew W. Johnson, Patrick H. Finan, and Roland R. Griffiths. 2021. "Effects of Psilocybin-assisted Therapy on Major Depressive Disorder: A Randomized Clinical Trial." *JAMA Psychiatry* 78 (5): 481-489.
- Davis, Alan K., Joseph P. Barsuglia, Rafael Lancelotta, Robert M. Grant, and Elise Renn. 2018. "The Epidemiology of 5-methoxy- N, N-dimethyltryptamine (5 MeO-DMT) Use: Benefits, Consequences, Patterns of Use, Subjective Effects, and Reasons for Consumption." *Journal of Psychopharmacology* 32 (7): 779-792.
- Davis, Jensen. 2018. "Psychedelics in the Age After Aquarius." *Harvard Political Review*.
- de Mori, Bernd Brabec. 2011. "Tracing Hallucinations: Contributing to a Critical Ethnohistory of Ayahuasca Usage in the Peruvian Amazon." *The Internationalization of Ayahuasca*, edited by Beatriz Caiuby Labate and Henrik Jungaberle, 23-47. Münster: LIT Verlag.
- de Mori, Bernd Brabec. 2016. "What Makes Natives Unique? Overview of Knowledge Systems Among the World's Indigenous People." *Taiwan Journal of Indigenous Studies* 8: 43-61.
- de Rose, Isabel Santana. 2006. "Repensando as Fronteiras entre Espiritualidade e Terapia: Reflexões sobre a 'cura' no Santo Daime." *Campos-Revista de Antropologia* 7(1): 35-52.
- De Smet, Peter A.G.M. 1996. "Some Ethnopharmacological Notes on African Hallucinogen." *Journal of Ethnopharmacology* 50 (3): 141-146.

- de Wit, Harriet, Hanna M. Molla, Anya Bershad, Michael Bremmer, and Royce Lee. 2022. "Repeated Low Doses of LSD in Healthy Adults: A Placebo-controlled, Dose-response Study." *Addiction Biology* 27 (2): e13143.
- Deese, Kaelan. 2020. "Ann Arbor Lawmakers Vote to Decriminalize Psychedelic Mushrooms." *The Hill*. www.thehill.com.
- DeGrandpre, Richard. 2006. *The Cult of Pharmacology: How America Became the World's Most Troubled Drug Culture*. London: Duke University Press.
- Deleuze, Gilles and Félix Guattari. 1980. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minnesota: University of Minnesota Press.
- Deleuze, Gilles and Félix Guattari. 1987. *A Thousand Plateaus: Capitalism and Schizophrenia*, translator Brian Massumi. Minneapolis: University of Minnesota Press.
- Deloria, Vine Jr. and Daniel Wildcat. 2001. *Power and Place: Indian Education in America*. Golden: Fulcrum Publishing.
- Derlega, Valerian. J. and Alan L. Chaikin. 1977. "Privacy and Self-disclosure in Social Relationships." *Journal of Social Issues* 33 (3): 102–115.
- Desjarlais, Robert. 1994. "Struggling Along: The Possibilities for Experience Among the Homeless Mentally Ill." *American Anthropologist* 96 (4): 886-901.
- Desjarlais, Robert and C. Jason Throop. 2011. "Phenomenological Approaches in Anthropology." *Annual Review of Anthropology* 40: 87-102.
- Devine, Jimi. 2019. "Chicago Housing Authority's Pot Ban Means No Legal Cannabis Mechanism for the Poor." *High Times*. www.hightimes.com.
- Dilkes-Frayne, Ella. 2016. "Drugs at the Campsite: Socio-spatial Relations and Drug Use at Music Festivals." *International Journal of Drug Policy* 33: 27-35.
- Dobkin de Rios, Marlene. 1972. "The Anthropology of Drug-Induced Altered States of Consciousness: Some Theoretical Considerations." *Sociologus* 22 (1/2): 147-154.
- Dobkin de Rios, Marlene. 1984. *Visionary Vine: Hallucinogenic Healing in the Peruvian Amazon*. Prospect Heights, IL: Waveland Press, Inc.
- Dobkin de Rios, Marlene and Fred Katz. 1975. "Some Relationships Between Music and Hallucinogenic Ritual: The 'Jungle Gym' in Consciousness." *Ethos* 3 (1): 64–76.
- Doblin, Richard E., Merete Christiansen, Lisa Jerome, and Brad Burge. 2019. "The Past and Future of Psychedelic Science: An Introduction to this Issue." *Journal of Psychoactive Drugs* 51 (2): 93-97.

- Dore, Jennifer, Brent Turnipseed, Shannon Dwyer, Andrea Turnipseed, Julane Andries, German Ascani, Celeste Monnette, Angela Huidekoper, Nicole Strauss, and Phil Wolfson. 2019. "Ketamine Assisted Psychotherapy (KAP): Patient Demographics, Clinical Data and Outcomes in Three Large Practices Administering Ketamine with Psychotherapy." *Journal of Psychoactive Drugs* 51 (2): 189-198.
- Douglas, Mary. 1985. *Risk Acceptability According to the Social Sciences*. New York: The Russell Sage Foundation.
- Douglas, Mary. 1992. *Risk and Blame*. London: Routledge.
- Douglas, Mary. 2013. *Constructive Drinking*. London: Routledge.
- Drug Policy Alliance. 2017. *It's Time for the U.S. to Decriminalize Drug Use and Possession*.
- Dudek, Agnes. 2022. "An Exploration of the Aberrant Perceptions Experienced by Westerners in the Peruvian Amazon Amid Shipibo Ayahuasca Practices." *Anthropology of Consciousness*.
- Duff, Cameron. 2004. "Drug Use as a 'Practice of the Self': Is there Any Place for an 'Ethics of Moderation' in Contemporary Drug Policy?" *International Journal of Drug Policy* 15 (5-6): 385-393.
- Duff, Cameron. 2007. "Towards a Theory of Drug Use Contexts: Space, Embodiment and Practice." *Addiction Research and Theory* 15 (5): 503-519.
- Duff, Cameron. 2008. "The Pleasure in Context." *International Journal of Drug Policy* 19: 384-392.
- Dumit, Joseph and Emilia Sanabria. 2022. "Set, Setting, and Clinical Trials: Colonial Technologies and Psychedelics: Experiment." *The Palgrave Handbook of the Anthropology of Technology*, 291-308. Singapore: Springer Singapore.
- Eisner, Bruce. 1994. *Ecstasy: The MDMA Story*. Berkeley: Ronin Publishing Inc.
- El-Seedi, Hesham. R., Peter A.G.M. De Smet, Olof Beck, Göran Possnert, and Jan G. Bruhn. 2005. "Prehistoric Peyote Use: Alkaloid Analysis and Radiocarbon Dating of Archaeological Specimens of *Lophophora* from Texas." *Journal of Ethnopharmacology* 101 (1-3): 238-242.
- Erickson, Barbra E. 2007. "Toxin or Medicine? Explanatory Models of Radon in Montana Health Mines." *Medical Anthropology Quarterly* 21 (1): 1-21.
- Erowid. 2016. *Psilocybin, Psilocin, and Magic Mushroom Dosage*. www.erowid.com.

- Erowid. 2017a. *LSD Dosage*. www.erowid.com.
- Erowid. 2017b. *MDA Dosage*. www.erowid.com.
- Erowid. 2020. *MDMA Dosage*. www.erowid.com.
- Erowid. 2022. *Ketamine Dosage*. www.erowid.com.
- Erritzoe D., L. Roseman, M. Nour, K. MacLean, M. Kaelen, D. J. Nutt, and R. L. Carhart-Harris. 2018. "Effects of Psilocybin Therapy on Personality Structure." *Acta Psychiatrica Scandinavica* 138 (5): 368–378.
- Estrada, Alvaro. 2003. "Introduction." *María Sabina: Selections*, edited by Jerome Rothenberg, 127-132. Berkeley: University of California Press.
- Fainzang, Sylvie. 2013. "The Other Side of Medicalization: Self Medicalization and Self-Medication." *Culture, Medicine, and Psychiatry* 37: 488-504.
- Farrugia, Adrian and Suzanne Fraser. 2017. "Science and Scepticism: Drug Information, Young Men and Counterpublic Health." *Health* 21 (6): 595-615.
- Faudree, Paja. 2020. "'Making Medicine' with Salvia divinorum: Competing Approaches and Their Implications." *Medical Anthropology* 39 (7): 582-596.
- Ferreira, Rodrigo H.G. 2015. "The War on Drugs Addiction: The Role of Misinformation in the Persistence of U.S. Drug Policy." *Revue Européenne des Sciences Sociales* 53 (1): 265-291.
- Field, Andy. 2018. *Discovering Statistics Using IBM SPSS Statistics*, 5th Ed. London: Sage Publications, Inc.
- Fitzgerald, John. 1997. "An Assemblage of Desire, Drugs, and Techno." *Angelaki: Journal of the Theoretical Humanities* 3 (2): 41-57.
- Fitzgerald, John and Margaret Hamilton. 1996. "The Consequences of Knowing: Ethical and Legal Liabilities in Illicit Drug Research." *Social Science & Medicine* 43 (11): 1591-1600.
- Forstmann, Matthias and Christina Sagioglou. 2017. "Lifetime Experience with (Classic) Psychedelics Predicts Pro-environmental Behavior Through an Increase in Nature Relatedness." *Journal of Psychopharmacology* 31 (8): 975-988.
- Forstmann, Matthias and Christina Sagioglou. 2021. "New Insights Into the Clinical and Nonclinical Effects of Psychedelic Substances." *European Psychologist* 27 (4): 1-11.

- Forstmann, Matthias, Daniel A. Yudkin, Annayah M. B. Prosser, S. Megan Heller, and Molly J. Crockett. 2020. "Transformative Experience and Social Connectedness Mediate the Mood-enhancing Effects of Psychedelic Use in Naturalistic Settings." *Proceedings of the National Academy of Sciences* 117 (5): 2338-2346.
- Fortun, Kim. 2012. "Ethnography in Late Industrialism." *Cultural Anthropology* 27 (3): 446-464.
- Fotiou, Evgenia. 2016. "The Globalization of Ayahuasca Shamanism and the Erasure of Indigenous Shamanism." *Anthropology of Consciousness* 27 (2): 151-179.
- Foucault, Michael. 1986. *The History of Sexuality: Vol. 2. The Use of Pleasure*, translated by R. Hurley. London: Penguin Press.
- Foucault, Michael. 1988. "Technologies of the Self." *Technologies of the Self: A Seminar with Michel Foucault*, edited by Luther H. Martin, Huck Gutman, and Patrick H. Hutton, 16-49. London: Tavistock.
- Fox, Jacob, Alexis Smith, Alexander Yale, Christopher Chow, Elsa Alaswad, Tracy Cushing, and Andrew A. Monte. 2018. "Drugs of Abuse and Novel Psychoactive Substances at Outdoor Music Festivals in Colorado." *Substance Use & Misuse* 53 (7): 1203-1211.
- Frame, Tom. 2019. "Psychedelic Timeline." *Psychedelic Times*. www.psychedelictimes.com.
- Fritz, Jimi. 1999. *Rave Culture: An Insider's View*. Victoria, BC: Small Fry.
- Gallagher, Shaun. 2013. "A Pattern Theory of Self." *Frontiers in Human Neuroscience* 7: 443.
- Garcia-Romeu, Albert, Alan K. Davis, Fire Erowid, Earth Erowid, Roland R. Griffiths, and Matthew W. Johnson. 2019. "Cessation and Reduction in Alcohol Consumption and Misuse After Psychedelic Use." *Journal of Psychopharmacology* 33 (9): 1088-1101.
- Garza, R. 2016. *Marijuana Legalization: Implementing the World's First System of Legally Growing, Processing and Retailing Marijuana*. PowerPoint Presentation. Olympia: Washington State Liquor and Cannabis Board.
- Gasser, Peter, Dominique Holstein, Yvonne Michel, Rick Doblin, Berra Yazar-Klosinski, Torsten Passie, and Rudolf Brenneisen. 2014. "Safety and Efficacy of Lysergic Acid Diethylamide-Assisted Psychotherapy for Anxiety Associated with Life-Threatening Disease." *Journal of Nervous and Mental Disease* 202: 513-520.
- Gasser, Peter, Katharina Kirchner, and Torsten Passie. 2015. "LSD-Assisted Psychotherapy for Anxiety Associated with a Life-Threatening Disease: A Qualitative Study of Acute and Sustained Subjective Effects." *Journal of Psychopharmacology* 29: 57-68.
- Gelack, Michael. 1997. *Cocaine and Federal Sentencing Policy*. Washington, DC: US Sentencing Commission.

- Genep, Arnold van. 1909. *Les rites de passage: étude systématique des rites de la porte et du seuil, de l'hospitalité, de l'adoption, de la grossesse et de l'accouchement, de la naissance, de l'enfance, de la puberté, de l'initiation, de l'ordination, du couronnement des fiançailles et du mariage, des funérailles, des saisons, etc.* Vol. 5. É. Nourry
- Gerard, Morgan. 2004. "Selecting Ritual: DJs, Dancers and Liminality in Underground Dance Music." *Rave, Culture and Religion*, edited by Graham St John, 166–83. London: Routledge.
- Gilmore, Lee. 2010. *Theatre in a Crowded Fire: Ritual and Spirituality at Burning Man*. Berkeley: University of California Press.
- Global Commission on Drug Policy (GCDP). 2011. *War on Drug: Report of the Global Commission on Drug Policy*.
- Golden, Tasha L., Susan Magsamen, Clara C. Sandu, Shuyang Lin, Grace Marie Roebuck, Kathy M. Shi, and Frederick S. Barrett. 2022. "Effects of Setting on Psychedelic Experiences, Therapies, and Outcomes: A Rapid Scoping Review of the Literature." *Disruptive Psychopharmacology* 35-70.
- Griffiths, Roland R., Matthew W. Johnson, Michael A. Carducci, Annie Umbricht, William A. Richards, Brian D. Richards, Mary P. Cosimano, and Margaret A. Klinedinst. 2016. "Psilocybin Produces Substantial and Sustained Decreases in Depression and Anxiety in Patients with Life-threatening Cancer: A Randomized Double-blind Trial." *Journal of Psychopharmacology* 30 (12): 1181-1197.
- Griffiths, Roland R., William A. Richards, Matthew W. Johnson, Una D. McCann, and Robert Jesse. 2008. "Mystical-type Experiences Occasioned by Psilocybin Mediate the Attribution of Personal Meaning and Spiritual Significance 14 Months Later." *Journal of Psychopharmacology* 22 (6): 621–632.
- Griffiths, Roland R., William A. Richards, Una D. McCann, and Robert Jesse. 2006. "Psilocybin Can Occasion Mystical-Type Experiences Having Substantial and Sustained Personal Meaning and Spiritual Significance." *Psychopharmacology* 187 (3): 268-283.
- Grinspoon, Lester and James B. Bakalar. 1981. "The Psychedelic Drug Therapies." *Current Psychiatric Therapy* 20: 275–283.
- Grob, Charles S., Alicia L. Danforth, Gurpreet S. Chopra, Marycie Hagerty, Charles R. McKay, Adam L. Halberstadt, and George R. Greer. 2011. "Pilot Study of Psilocybin Treatment for Anxiety in Patients with Advanced-Stage Cancer." *Archives of General Psychiatry* 68 (1): 71–78.

- Grob, Charles S., Dennis J. McKenna, James C. Callaway, Glacus S. Brito, Edison S. Neves, Guilherme Oberlaender, Oswaldo L. Saide, Elizeu Labigalini, Christiane Tacla, Claudio T. Miranda, Rick J. Strassman, and Kyle B. Boone. 1996. "Human Psychopharmacology of Hoasca, a Plant Hallucinogen Used in Ritual Context in Brazil." *The Journal of Nervous and Mental Disease* 184 (2): 86-94.
- Grof, Stanislav. 2008. *LSD Psychotherapy*. Santa Cruz, CA: Multidisciplinary Association for Psychedelic Studies.
- Grosz, Elizabeth. 1994. *Volatile Bodies: Towards a Corporeal Feminism*. Sydney: Allen and Unwin.
- Grov, Christian, Brian C. Kelly, and Jeffrey T. Parsons. 2009. "Polydrug Use Among Club-Going Young Adults Recruited Through Time Space Sampling." *Substance Use and Misuse* 44: 848-864.
- Guerra-Doce, Elisa. 2015. "Psychoactive Substances in Prehistoric Times: Examining the Archaeological Evidence." *Time & Mind: The Journal of Archaeology, Consciousness & Culture* 8 (1): 91-112.
- Gwynne, Kristen. 2015. "Meet the People Who Want to Make It Safer to Take Drugs at Festivals." *Rolling Stone*. www.rollingstone.com.
- Haden, Mark, Brian Emerson, and Kenneth W. Tupper. 2016. "A Public-Health-Based Vision for the Management and Regulation of Psychedelics." *Journal of Psychoactive Drugs* 48 (4): 243-252.
- Haijen, Eline C. H. M., Mendel Kaelen, Leor Roseman, Christopher Timmermann, Hannes Kettner, Suzanne Russ, David Nut, Richard E. Daws, Adam D. G. Hampshire, Romy Lorenz, and Robin L. Carhart-Harris. 2018. "Predicting Responses to Psychedelics: A Prospective Study." *Frontiers in Pharmacology* 9: 1-20.
- Hall, Will. 2021. "Ending the Silence Around Psychedelic Therapy Abuse." *Mad in America: Science, Psychiatry, and Social Justice*. www.madinamerica.com.
- Halpern, John H., Andrea R. Sherwood, James I. Hudson, Deborah Yurgelun-Todd, and Harrison G. Pope. 2005. "Psychological and Cognitive Effects of Long-Term Peyote Use Among Native Americans." *Biological Psychiatry* 58 (8): 624-631.
- Halpern, John H., Andrea R. Sherwood, Torsten Passie, Kimberly C. Blackwell, and A. James Rutenber. 2008. "Evidence of Health and Safety in American Members of a Religion Who Use a Hallucinogenic Sacrament." *Medical Science Monitor* 14 (8): SR15-22.
- Hansen, Dorthé, Bruce Maycock, and Tony Lower. 2001. "Weddings, Parties, Anything..." A Qualitative Analysis of Ecstasy Use in Perth, Western Australia." *International Journal of Drug Policy* 12: 181-199.

- Haraway, Donna. 2003. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Vol. 1. Chicago: Prickly Paradigm Press.
- Haraway, Donna. 2008. *When Species Meet*. Minneapolis, MN: University of Minnesota Press.
- Hardon, Anita and Emilia Sanabria. 2017. "Fluid Drugs: Revisiting the Anthropology of Pharmaceuticals." *Annual Review of Anthropology* 46: 117-132.
- Hari, Johann. 2019. *Lost Connections: Uncovering the Real Causes of Depression-and the Unexpected Solutions*. Bloomsbury Circus.
- Harner, Michael. 1973. *Hallucinogens and Shamanism*. Oxford University Press.
- Harner, Michael. 1990. *The Way of the Shaman*. San Francisco, CA: Harper San Francisco.
- Harris, Marvin. 2001. *The Rise of Anthropological Theory: A History of Theories of Culture*. Walnut Creek: Rowman AltaMira Press.
- Harris, Shana. 2019. "Narrating the Unspeakable." *Journal of Extreme Anthropology* 3 (2): 116-140.
- Hartogsohn, Ido. 2016. "Set and Setting, Psychedelics and the Placebo Response: An Extra Pharmacological Perspective on Psychopharmacology." *Journal of Psychopharmacology* 30 (12): 1259-1267.
- Hartogsohn, Ido. 2017. "Constructing Drug Effects: A History of Set and Setting." *Drug Science, Policy and Law* 3 (0): 1-17.
- Hartogsohn, Ido. 2020. "How Set and Setting Shape Psychedelic Cultures." www.chacruna.net.
- Hausfeld, Russell. 2019. "Chicago Could Become Largest City to Decriminalize Entheogenic Plants." *Psymposia*. www.psymposia.com.
- Havens, Joseph. 1964. "A Working Paper: Memo on the Religious Implications of the Consciousness-Changing Drugs (LSD, Mescaline, Psilocybin)." *Journal for the Scientific Study of Religion* 3 (2): 216-226.
- Hayden, Cori. 2020. *When Nature Goes Public: The Making and Unmaking of Bioprospecting in Mexico*. Princeton: Princeton University Press.
- Heath, Dwight B. 2012. *Drinking Occasions: Comparative Perspectives on Alcohol and Culture*. London: Routledge.
- Heidegger, Martin. 1971. *Being and Time*. Albany, NY: SUNY Press.

- Hendricks, Peter S., Christopher B. Thorne, C. Brendan Clark, David W. Coombs, and Matthew W. Johnson. 2015. "Classic Psychedelic Use is Associated with Reduced Psychological Distress and Suicidality in the United States Adult Population." *Journal of Psychopharmacology* 29 (3): 280-288.
- Herrera, Dave. 2016. "Activist Whose Daughter Died from Drugs Wants Prevention at EDC Festivals." *Las Vegas Review-Journal*. www.reviewjournal.com.
- Hill, Thomas. 1990. "Peyotism and the Control of Heavy Drinking: The Nebraska Winnebago in the Early 1990s." *Human Organization* 49 (3): 255-262.
- Hinton, Devon E. and Laurence J. Kirmayer. 2017. "The Flexibility Hypothesis of Healing." *Culture, Medicine, and Psychiatry* 41: 3–34.
- Horák, Miroslav, Nahanga Verter, and Kristina Somerlíková. 2021. "Initiation Plants in Drug Addiction Treatment: The Purgahuasca Therapy." *Anthropology of Consciousness* 32 (1): 33-54.
- Horton, Sarah, Cesar Abadía, Jessica Mulligan, and Jennifer Jo Thompson. 2014. "Critical Anthropology of Global Health 'Takes a Stand' Statement: A Critical Medical Anthropological Approach to the U.S.'s Affordable Care Act." *Medical Anthropology Quarterly* 28 (1): 1-22.
- Humans Rights Watch. 2016. *Every 25 Seconds – The Human Toll of Criminalizing Drug use in the United States*. www.hrw.org.
- Hunt, Geoffrey and Judith C. Barker. 2001. "Socio-cultural Anthropology and Alcohol and Drug Research: Towards a Unified Theory." *Social Science & Medicine* 53: 165-188.
- Hunt, Geoffrey, Kristin Evans, and Faith Kares. 2007. "Drug Use and Meanings of Risk and Pleasure." *Journal of Youth Studies* 10 (1): 73-96.
- Hunt, Geoffrey, Kristin Evans, Molly Moloney, and Noelani Bailey. 2009. "Combining Different Substances in the Dance Scene: Enhancing Pleasure, Managing Risk and Timing Effects." *Journal of Drug Issues* 39 (3): 495-522.
- Hutson, Scott R. 1999. "Technoshamanism: Spiritual healing in the Rave Subculture." *Popular Music and Society* 23 (3): 53-77.
- Hutson, Scott R. 2000. "The Rave: Spiritual Healing in Modern Western Subcultures." *Anthropological Quarterly* 73 (1): 35-49.

- Ibrahim, Lobna, Nancy Diazgranados, David A. Luckenbaugh, Rodrigo Machado-Vieira, Jacqueline Baumann, Alan G. Mallinger, and Carlos A. Zarate Jr. 2011. "Rapid Decrease in Depressive Symptoms with an N-methyl-d-aspartate Antagonist in ECT-resistant Major Depression." *Progress in Neuro-Psychopharmacology and Biological Psychiatry* 35 (4): 1155-1159.
- Irwin, Scott A. and Alana Iglewicz. 2010. "Oral Ketamine for the Rapid Treatment of Depression and Anxiety in Patients Receiving Hospice Care." *Journal of Palliative Medicine* 13 (7): 903-908.
- Isbell, Harris, A. B. Wolbach, A. Wikler, and E. J. Miner. 1961. "Cross Tolerance Between LSD and Psilocybin." *Psychopharmacology* 2 (3): 147-159.
- Jackson, Michael. 1989. *Paths Towards a Clearing: Radical Empiricism and Ethnographic Inquiry*. Bloomington, IN: Indiana University Press.
- Jacobs, Bruce A. 1999. *Dealing Crack: The Social World of Streetcorner Selling*. Boston, MA: Northeastern University Press.
- Jacobs-Huey, Lanita. 2002. "The Natives Are Gazing and Talking Back: Reviewing the Problematic of Positionality, Voice, and Accountability Among 'Native' Anthropologists." *American Anthropologist* 104 (3): 791-804.
- Jaeger, Kyle. 2019. "Four More Major Cities Take Steps to Decriminalize Psychedelics." *Marijuana Moment*. www.marijuanamoment.net.
- Jain, S. Lochlann. 2013. *Malignant: How Cancer Becomes Us*. Berkeley: University of California Press.
- James, William. 1902. *The Varieties of Religious Experience: A Study in Human Nature*. London: Longmans, Green, and Company.
- Janiger, Oscar. 1959. "The Use of Hallucinogenic Agents in Psychiatry." *California Clinician* 55: 222-224.
- Janzen, John M. 1987. "Therapy Management." *Medical Anthropology Quarterly* 1 (1): 68-84.
- Jay, Mike. 1999. "Why do People Take Drugs." *International Journal of Drug Policy* 10 (1): 5-7.
- Jensen, Eric L., Clayton Mosher, Jurg Gerber, and Kate Angulski. 2019. "Progress at the State Level Versus Recent Regress at the Federal Level: Changes in the Social Consequences of the U.S. War on Drugs." *Contemporary Drug Problems* 46 (2): 139-164.

- Jensen, Eric L. and Aaron Roussell. 2016. "Field Observations of the Developing Recreational Cannabis Economy in Washington State." *International Journal of Drug Policy* 33: 96-101.
- Johnson, Matthew W., Albert Garcia-Romeu, Mary P. Cosimano, and Roland R. Griffiths. 2014. "Pilot Study of the 5-HT_{2A}R Agonist Psilocybin in the Treatment of Tobacco Addiction." *Journal of Psychopharmacology* 28: 983-992.
- Johnson, Matthew W., Albert Garcia-Romeu, and Roland R. Griffiths. 2017. "Long-term Follow-up of Psilocybin-facilitated Smoking Cessation." *The American Journal of Drug and Alcohol Abuse* 43 (1): 55-60.
- Johnstad, Petter G. 2018. "Entheogenic Spirituality: Exploring Spiritually Motivated Entheogen Use Among Modern Westerners." *Journal of Entheogenic & Qualitative Research* 12: 244-260.
- Kaelen, Mendel, Frederick S. Barrett, Leor Roseman, Romy Lorenz, N. Family, Mark Bolstridge, Valerie H. Curran, Amanda Feilding, David Nutt, and Robin L. Carhart-Harris. 2015. "LSD Enhances the Emotional Response to Music." *Psychopharmacology* 232 (19): 3607-3614.
- Kaelen, Mendel, Bruna Giribaldi, Jordan Raine, Lisa Evans, Christopher Timmerman, Natalie Rodriguez, Leor Roseman, Amanda Fielding, David Nutt, and Robin Carhart-Harris. 2018. "The Hidden Therapist: Evidence for a Central Role of Music in Psychedelic Therapy." *Psychopharmacology* 235 (2): 505-519.
- Kaelen, Mendel, Leor Roseman, Joshua Kahan, Andre Santos-Ribeiro, Csaba Orban, Romy Lorenz, Frederick S. Barrett, Mark Bolstridge, Tim Williams, Luke Williams, Matthew B. Wall, Amanda Fielding, Suresh Muthukumaraswamy, David J. Nutt, and Robin Carhart-Harris. 2017. "LSD Modulates Music-induced Imagery via Changes in Parahippocampal Connectivity." *European Neuropsychopharmacology* 26 (7): 1099-1109.
- Kangaslampi, Samuli, Aino Hausen, and Tarina Rauteenmaa. 2020. "Mystical Experiences in Retrospective Reports of First Times Using a Psychedelic in Finland." *Journal of Psychoactive Drugs* 52 (4): 309-318.
- Karsten, Rafael. 1923. *Blood Revenge, War and Victory Feasts Among the Jibaro Indians of Eastern Ecuador*. No. 79. US Government Printing Office.
- Kavanaugh, Philip R. and Tammy L. Anderson. 2008. "Solidarity and Drug Use in The Electronic Dance Music Scene." *The Sociological Quarterly* 49 (1): 181-208.
- Keane, Helen. 2008. "Pleasure and Discipline in the Uses of Ritalin." *International Journal of Drug Policy* 19 (5): 401-409.

- Kenney, Andrew. 2019. "Spores of a Psychedelic Mushroom Industry are Sprouting in Denver after Decriminalization." *The Denver Post*. www.denverpost.com.
- Kettner, Hannes, Sam Gandy, Eline C.H.M. Haijen, and Robin L. Carhart-Harris. 2019. "From Egoism to Ecoism: Psychedelics Increase Nature Relatedness in a State-Mediated and Context-Dependent Manner." *International Journal of Environmental Research and Public Health* 16: 1-23.
- Kettner, H., F. E. Rosas, C. Timmermann, L. Kärtner, R. L. Carhart-Harris, and L. Roseman. 2021. "Psychedelic Communitas: Intersubjective Experience during Psychedelic Group Sessions Predicts Enduring Changes in Psychological Wellbeing and Social Connectedness." *Frontiers in Pharmacology* 12: 234.
- Kipnis, Andrew B. 2015. "Agency Between Humanism and Posthumanism: Latour and his Opponents." *HAU: Journal of Ethnographic Theory* 5 (2): 43-58.
- Kirksey, Eben. 2015. "Multispecies Intra-Actions." *The Journal of Nature in Visual Culture* 32: 5-7.
- Kirksey, Eben. 2017. "Lively Multispecies Communities, Deadly Racial Assemblages, and the Promise of Justice." *South Atlantic Quarterly* 116 (1): 195-206.
- Kirksey, Eben. 2020. "Chemosociality in Multispecies Worlds: Endangered Frogs and Toxic Possibilities in Sydney." *Environmental Humanities* 12 (1): 23-50.
- Kirksey, Eben S. and Stefan Helmreich. 2010. "The Emergence of Multispecies Ethnography." *Cultural Anthropologist* 25 (4): 545-576.
- Kirshner, David H. and Lingqi Meng. 2012. "Enculturation and Acculturation." *Encyclopedia of the Sciences of Learning*, edited by Norbert M. Seel. Berlin: Springer Publishing.
- Kleinman, Arthur. 1997. *Writing at the Margin: Discourse Between Anthropology and Medicine*. Berkeley: University of California Press.
- Kloos, Stephan. 2017. "The Pharmaceutical Assemblage: Rethinking Sowa Rigpa and the Herbal Pharmaceutical Industry in Asia." *Current Anthropology* 58 (6): 693-717.
- Kohn, Eduardo. 2007. "How Dogs Dream: Amazonian Natures and the Politics of Transspecies Engagement." *American Ethnologist* 34 (1): 3-24.
- Kohn, Eduardo. 2013. "Introduction: Runa Puma." *How Forests Think: Toward An Anthropology Beyond the Human*, edited by Eduardo Kohn, 1-26. Berkeley, CA: University of California Press.

- Krupitsky, Evgeny M., Andrei A. Burakov, Igor V. Dunaevsky, Tatyana N. Romanova, Tatyana Y. Slavina, and Alexander Y. Grinenko. 2007. "Single Versus Repeated Sessions of Ketamine-Assisted Psychotherapy for People with Heroin Dependence." *Journal of Psychoactive Drugs* 39: 13-19.
- Krupitsky, Evgeny, Andrey Burakov, Tatyana Romanova, Igor Dunaevsky, Rick Strassman, and Alexander Grinenko. 2002. "Regular Article: Ketamine Psychotherapy for Heroin Addiction: Immediate Effects and Two-Year Follow-Up." *Journal of Substance Abuse Treatment* 23: 273–283.
- Kyriakopoulos, Leandros. 2021. "Liminality (Re-)Realized in the Psychedelic Rave." *Anthropology and Humanism* 46 (2): 226-243.
- Labate, Beatriz Caiuby. 2000. *A Reinvenção do Uso da Ayahuasca nos Centros Urbanos*. Universidade Estadual de Campinas, Instituto de Filosofia e Ciências Humanas.
- Labate, Beatriz Caiuby and Clancy Cavnar. 2014. *Ayahuasca Shamanism in the Amazon and Beyond*. Oxford, NY: Oxford University Press.
- Labate, Beatriz Caiuby and Glauber Loures de Assis. 2017. "The Religion of the Forest: Reflections on the International Expansion of a Brazilian Ayahuasca Religion." *The World Ayahuasca Diaspora: Reinventions and Controversies*, edited by Beatriz Caiuby Labate, Clancy Cavnar, and Alex K. Gearin, 57-78. London: Routledge.
- Labate, Beatriz Caiuby and Edward MacRae. 2010. *Ayahuasca, Ritual and Religion in Brazil*. London: Routledge.
- Labate, Beatriz Caiuby and Gustavo Pacheco. 2010. *Opening the Portals of Heaven: Brazilian Ayahuasca Music*. Münster, Germany: Lit Verlag.
- Lamonica, Aukje K., Boeri, Miriam, and Timothy Anderson. 2016. "Gaps in Medical Marijuana Policy Implementation: Real-time Perspectives from Marijuana Dispensary Entrepreneurs, Health Care Professionals and Medical Marijuana Patients." *Drugs Education Prevention Policy* 23 (5): 422-434.
- Latour, Bruno. 2007. *Reassembling the Social: An Introduction to Actor-network-theory*. New York: Oxford.
- Laughlin, Charles D. n.d. *Phenomenological Anthropology*. Unpublished Manuscript.
- Lawlor, Sean. 2020. "Psychedelic Exceptionalism and Reframing Drug Narratives: An Interview with Dr. Carl Hart." *Psychedelics Today*. www.psychedelictoday.com.
- Leary, Timothy. 1961. *Drugs, Set, and Suggestibility*. Annual Meeting of the American Psychological Association.

- Leary, Timothy, George H. Litwin, and Ralph Metzner. 1963. "Reactions to Psilocybin Administered in a Supportive Environment." *Journal of Nervous & Mental Disease* 137 (6): 561-573.
- Leary, Timothy, Ralph Metzner, and Richard Alpert. 1964. *The Psychedelic Experience: A Manual Based on the Tibetan Book of the Dead*. New York: Kensington Publishing Corp.
- Lebedev, Alexander V., Mendel Kaelen, Martin Lövdén, Jonna Nilsson, Amanda Feilding, David J. Nutt, and Robin L. Carhart-Harris. 2016. "LSD-induced Entropic Brain Activity Predicts Subsequent Personality Change." *Human Brain Mapping* 37 (9): 3203–3213.
- LeCompte, Margaret D. and Jean J. Schensul. 2010. *Designing and Conducting Ethnographic Research: An Introduction*, 2nd Ed. Lanham: AltaMira Press.
- Lekhtman, Alexander. 2019. "Where US Psychedelic Decriminalization Efforts Stand Right Now." *Filter Magazine*. www.filltermag.org.
- Lende, Daniel H. n.d. *Experience-near Interviewing*. Unpublished Manuscript.
- Lende, Daniel H. 2005. "Wanting and Drug Use: A Biocultural Approach to the Analysis of Addiction." *Ethos* 33 (1): 100-124.
- Lende, Daniel H., Terri Leonard, Claire E. Sterk, and Kirk Elifson. 2007. "Functional Methamphetamine Use: The Insider's Perspective." *Addiction Research & Theory* 15 (5): 465-477.
- Letcher, Andy. 2007. "Mad Thoughts on Mushrooms: Discourse and Power in the Study of Psychedelic Consciousness." *Anthropology of Consciousness* 18 (2): 74-97.
- Letheby, Chris. 2017. "Naturalizing Psychedelic Spirituality." *Zygon: Journal of Religion and Science*. 52 (3): 623-642.
- Levy, Robert I. and Douglas W. Hollan. 2014. "Person-Centered Interviewing and Observation." *Handbook of Methods in Cultural Anthropology*, edited by H. Russell Bernard and Clarence C. Gravlee, 313-342. Lanham: Rowman & Littlefield.
- Liebrenz, Michael, Rudolf Stohler, and Alain Borgeat. 2009. "Repeated Intravenous Ketamine Therapy in a Patient with Treatment-resistant Major Depression." *The World Journal of Biological Psychiatry* 10 (4-2): 640-643.
- Life Magazine. 1966. *LSD: The Exploding Threat of the Mind Drug that Got Out of Control*.
- Linguist, Galina. 1995. "Traveling by the Other's Cognitive Maps or Going Native and Coming Back." *Ethos* 60 (1-2): 5-40.

- Loizaga-Velder, Anja and Rolf Verres. 2014. "Therapeutic Effects of Ritual Ayahuasca Use in the Treatment of Substance Dependence-Qualitative Results." *Journal of Psychoactive Drugs* 46 (1): 63-72.
- Lörler, Marie-Lu. 1989. *Shamanic Healing: Within the Medicine Wheel*. Albuquerque, NM: Brotherhood of Life.
- Loseke, Donileen R. 2019. *Narrative Productions of Meanings: Exploring the Work of Stories in Social Life*. Lanham: Lexington Books.
- Lowe, Celia. 2020. *Wild Profusion: Biodiversity Conservation in an Indonesian Archipelago*. Princeton: Princeton University Press.
- Luckman, Susan. 2003. "Going Bush and Finding One's 'Tribe': Raving, Escape and the Bush Doof." *Continuum: Journal of Media & Cultural Studies* 17 (3): 315-350.
- Luhrmann, Tanya M., Howard Nusbaum, and Ronald Thisted. 2010. "The Absorption Hypothesis: Learning to Hear God in Evangelical Christianity." *American Anthropologist* 112 (1): 66-78.
- Luna, Luis Eduardo. 2011. "Some Reflections on the Global Expansion of Ayahuasca." *The Internationalization of Ayahuasca*, edited by Beatriz Caiuby Labate and Henrick Jungaberle, 123-130. Münster: LIT Verlag.
- Lynch, Gordon and Emily Badger. 2006. "The Mainstream Post-rave Club Scene as a Secondary Institution: A British Perspective." *Culture and Religion* 7 (1): 27-40.
- Lyons, Taylor and Robin L. Carhart-Harris. 2018. "Increased Nature Relatedness and Decreased Authoritarian Political Views after Psilocybin for Treatment-resistant Depression." *Journal of Psychopharmacology* 32 (7): 811-819.
- Macbride, Katie. 2022. "I Am Certain That the LSD Experience Has Helped Me Very Much." *Inverse*. www.inverse.com.
- MacLean, Katherine A., Matthew W. Johnson, and Roland R. Griffiths. 2011. "Mystical Experiences Occasioned by the Hallucinogen Psilocybin Lead to Increases in the Personality Domain of Openness." *Journal of Psychopharmacology* 25: 1453-1461.
- MacLean, Katherine A., Jeannie-Marie S. Leoutsakos, Matthew W. Johnson, and Roland R. Griffiths. 2012. "Factor Analysis of the Mystical Experience Questionnaire: A Study of Experiences Occasioned by the Hallucinogen Psilocybin." *Journal for the Scientific Study of Religion* 51 (4): 721-737.

- Madsen, Martin Korsbak, Patrick MacDonald Fisher, Dea Siggaard Stenbæk, Sara Kristiansen, Daniel Burmester, Szabolcs Lehel, Tomas Páleníček, Martin Kuchař, Claus Svarer, Brice Ozenne, and Gitte M. Knudsen. 2020. "A Single Psilocybin Dose is Associated with Long-term Increased Mindfulness, Preceded by a Proportional Change in Neocortical 5-HT_{2A} Receptor Binding." *European Neuropsychopharmacology* 33: 71-80.
- Maguire, Kathleen. 2010. *Sourcebook of Criminal Justice Statistics*. Albany, NY: University at Albany, School of Criminal Justice.
- Majewski, Taylor. 2022. "Psychedelics Are Having a Moment and Women Could be the Ones to Benefit." *MIT Technology Review*. www.technologyreview.com
- Malbon, Ben. 1999. *Clubbing: Dancing, Ecstasy and Vitality*. London, England: Routledge.
- Malone, Tara C., Sarah E. Mennenga, Jeffrey Guss, Samantha K. Podrebarac, Lindsey T. Owens, Anthony P. Bossis, Alexander B. Belser, Gabrielle Agin-Liebes, Michael P. Bogenschutz, and Stephen Ross. 2018. "Individual Experiences in Four Cancer Patients Following Psilocybin-Assisted Psychotherapy." *Frontiers in Pharmacology* 9 (256): 1-6.
- Maqueda, Ana Elda. 2018. "The Use of *Salvia divinorum* from a Mazatec Perspective." *Plant Medicines, Healing and Psychedelic Science: Cultural Perspectives*, edited by Beatriz Caiuby Labate and Clancy Cavnar, 55–70. Switzerland: Springer.
- Marcus, George E. and Michael Fisher. 1986. *Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences*. Chicago: University of Chicago Press.
- Margolin, Madison. 2020. "New York Assemblywoman Introduces Measure to Decriminalize Psilocybin." *Double Blind*. <http://doubleblindmag.com>.
- Markham, Annette N. 2004. "Representation in Online Ethnographies: A Matter of Context Sensitivity." *Online Social Research: Methods, Issues, & Ethics*, edited by Sarina Chen, Jon Hall, and Mark Johns, 141-155. New York: Peter Lang Publishers.
- Marlan, Dustin. 2019. "Beyond Cannabis: Psychedelic Decriminalization and Social Justice." *Lewis and Clark Law Review* 23 (3): 851-892.
- Marlan, Dustin. 2021. "The Myth of Psychedelic Exceptionalism." *Harvard Law: Bill of Health*. <http://blog.petrieflom.law.harvard.edu>.
- Marsland, Rebecca. 2012. "(Bio) sociality and HIV in Tanzania: Finding a Living to Support a Life." *Medical Anthropology Quarterly* 26 (4): 470-485.
- Mason, N. L., K. P. C. Kuypers, J. T. Reckweg, F. Müller, D. H. Y. Tse, B. Da Rios, S. W. Toennes, P. Stiers, A. Feilding, and J. G. Ramaekers. 2021. "Spontaneous and Deliberate Creative Cognition During and After Psilocybin Exposure." *Translational Psychiatry* 11 (1): 209.

- Mason, Natasha L., Elisabeth Mischler, Malin V. Uthaug, and Kim P.C. Kuypers. 2019. "Sub-acute Effects of Psilocybin on Empathy, Creative Thinking, and Subjective Well-being." *Journal of Psychoactive Drugs* 51 (2): 123-134.
- Masters, Robert E.L. and Jean Houston. 1970. "Therapeutic Applications of LSD and Related Drugs." *Psychedelics: The Uses and Implications of Psychedelic Drugs*, edited by Bernard Aaronson and Humphry Osmond. Anchor Books.
- Mathew, Sanjay J., James W. Murrough, Marije aan het Rot, Katherine A. Collins, David L. Reich, and Dennis S. Charney. 2010. "Riluzole for Relapse Prevention Following Intravenous Ketamine in Treatment-resistant Depression: A Pilot Randomized, Placebo-controlled Continuation Trial." *The International Journal of Neuropsychopharmacology* 13 (1): 71-82.
- Mattingly, Cheryl. 1994. "The Concept of Therapeutic 'Emplotment'." *Social Science Medicine* 38 (6): 811-822.
- McBride, Duance C., Yvonne Terry-McElrath, Henrick Harwood, James A. Inciardi, and Carl Leukefeld. 2009. "Reflections on Drug Policy." *Journal of Drug Issues* 39 (1): 71-88.
- McCarty, Maggine, Gene Falk, Randy Alison Aussenberg, and David H. Carpenter. 2015. *Drug Testing and Crime-Related Restrictions in TANF, SNAP, and Housing Assistance*. Washington, DC: Congressional Research Service.
- McGlothlin, William H., Sidney Cohen, and Marcella S. McGlothlin. 1964. "Short-term Effects of LSD on Anxiety, Attitudes and Performance." *The Journal of Nervous and Mental Disease* 139 (3): 266-273.
- McGlothlin, William H., Sidney Cohen, and Marcella S. McGlothlin. 1967. "Long Lasting Effects of LSD on Normals." *Archives of General Psychiatry* 17 (5): 521-532.
- McGonigle, Ian. 2016. "Patenting Nature or Protecting Culture? Ethnopharmacology and Indigenous Intellectual Property Rights." *Journal of Law and the Biosciences* 3 (1): 217-226.
- McKenna, Dennis J. 2005. "Ayahuasca and Human Destiny." *Journal of Psychoactive Drugs* 37 (2): 231-234.
- Measham, Fiona. 2004. "The Decline of Ecstasy, the Rise of 'Binge' Drinking and the Persistence of Pleasure." *Probation Journal* 51 (4): 309-326.
- Mediano, Pedro A.M., Fernando E. Rosas, Christopher Timmermann, Leor Roseman, David J. Nutt, Amanda Feilding, Mendel Kaelen, Morten L. Kringelbach, Adam B. Barrett, Anil K. Seth, Suresh Muthukumaraswamy, Daniel Bor, and Robin L. Carhart-Harris. 2020. "Effects of External Stimulation on Psychedelic State Neurodynamics." *BioRxiv*: 1-9.

- Miller, Melanie J., Juan Albarracin-Jordan, Christine Moore, and Jose M. Capriles. 2019. "Chemical Evidence for the Use of Multiple Psychotropic Plants in a 1,000-year-old Ritual Bundle from South America." *Proceedings of the National Academy of Sciences of the United States* 116 (23): 11207-11212.
- Mithoefer, Michael C. 2015. *A Manual for MDMA-Assisted Psychotherapy in the Treatment of Posttraumatic Stress Disorder*. MAPS: Multidisciplinary Association for Psychedelic Studies.
- Mithoefer, Michael C., Ann T. Mithoefer, Allison A. Feduccia, Lisa Jerome, Mark Wagner, Joy Wymer, Julie Holland, Scott Hamilton, Berra Uazar-Klosinski, Amy Emerson, and Rick Doblin. 2018. "3, 4-methylenedioxymethamphetamine (MDMA)-Assisted Psychotherapy for Post-Traumatic Stress Disorder in Military Veterans, Firefighters, and Police Officers: A Randomized, Double-Blind, Dose-Response, Phase 2 Clinical Trial." *The Lancet Psychiatry* 5: 486-497.
- Mithoefer, Michael C., Mark T. Wagner, Ann T. Mithoefer, Lisa Jerome, and Rick Doblin. 2011. "The Safety and Efficacy of 3, 4-methylenedioxymethamphetamine-Assisted Psychotherapy in Subjects with Chronic, Treatment-Resistant Posttraumatic Stress Disorder: The First Controlled Pilot Study." *Journal of Psychopharmacology* 25 (4): 439-452.
- Moeran, Brian. 2009. "From Participant Observation to Observant Participation: Anthropology, Fieldwork, and Organizational Ethnography." *Organizational Ethnography: Studying the Complexities of Everyday Life*, edited by Sierk Ybema, Dvora Yanow, Harry Wels, and Frans Kamsteeg, 131-145. Los Angeles: Sage.
- Moerman, Daniel E. 2002. *Meaning, Medicine, and the "Placebo Effect"*. Vol. 28. Cambridge: Cambridge University Press.
- Moerman, Daniel E. and Wayne B. Jonas. 2002. "Deconstructing the Placebo Effect and Finding the Meaning Response." *Annals of Internal Medicine* 136 (6): 471-476.
- Mohr, Robin. 2018. "Preventing Drug-Related Deaths at Music Festivals: Why the 'RAVE' Act Should be Amended to Provide an Exception for Harm Reduction Services." *Chicago-Kent Law Review* 93 (3): 943-969.
- Moore, David. 2004. "Beyond 'Subculture' in the Ethnography of Illicit Drug Use." *Contemporary Drug Problems* 31: 181-212.
- Moore, David. 2008. "Erasing Pleasure from Public Discourse on Illicit Drugs: On the Creation and Reproduction of an Absence." *International Journal of Drug Policy* 19 (5): 353-358.
- Moore, Karenza and Steven Miles. 2004. "Young People, Dance and the Sub-cultural Consumption of Drugs." *Addiction Research and Theory* 12 (6): 507-523.

- Moore, Dawn and Mariana Valverde. 2000. "Maidens at Risk: 'Date Rape Drugs' and the Formation of Hybrid Risk Knowledges." *Economy and Society* 29 (4): 514-531.
- Moreno, Francisco A., Christopher B. Wiegand, E. Keolani Taitano, and Pedro L. Delgado. 2006. "Safety, Tolerability, and Efficacy of Psilocybin in 9 Patients with Obsessive-Compulsive Disorder." *Journal of Clinical Psychiatry* 67 (11): 1735-1740.
- Mosher, Clayton J. and Scott Akins. 2014. *Drugs and Drug Policy: The Control of Consciousness Alteration*, 2nd Ed. Thousand Oaks, CA: Sage.
- Mulligan, Chris, Brian Dobler, Kyle Wibby, and David Borden. 2006. *Falling Through the Cracks: Loss of State-Based Financial and Eligibility for Students Affected by the Federal Higher Education Act Drug Provision*. Washington, DC: Coalition for Higher Education Reform.
- Muneta, James D. 2020. "Peyote Crisis Confronting Modern Indigenous Peoples: The Declining Peyote Population and a Demand for Conservation." *American Indian Law Journal* 9 (1): 135-181.
- Munn, Henry. 1973. "The Mushrooms of Language." *Hallucinogens and Shamanism*, edited by Michael Harner, 86-122. Oxford: Oxford University Press.
- Musto, David F. 1999. *The American Disease: Origins of Narcotic Control*. 3rd Ed. New York: Oxford University Press.
- Nagele, Peter, Andreas Duma, Michael Kopec, Marie Anne Gebara, Alireza Parsoei, Marie Walker, Alvin Janski, Vassilis N. Panagopoulos, Pilar Cristancho, J. Philip Miller, Charles F Zorumski, and Charles R. Conway. 2015. "Nitrous Oxide for Treatment-Resistant Major Depression: A Proof-of-Concept Trial." *Biological Psychiatry* 78: 10-18.
- National Clearinghouse for Alcohol and Drug Information (NCADI). N.d. *Ketamine: A Fact Sheet*.
- National Institute on Drug Abuse (NIDA). 2011. *Nationwide trends*. www.drugabuse.gov.
- Netherland, Julie and Helena B. Hansen. 2016. "The War on Drugs That Wasn't: Wasted Whiteness, 'Dirty Doctors,' and Race in Media Coverage of Prescription Misuse." *Culture, Medicine, and Psychiatry* 40 (4): 664-686.
- Nettle, Bruno. 1956. *Music in Primitive Culture*. Cambridge, MA: Harvard University Press.
- New York Magazine. 2021. "Power Trip." *Cover Story*. www.psymposia.com.
- Nichter, Mark. 2008. "Coming to Our Senses: Appreciating the Sensorial in Medical Anthropology." *Transcultural Psychiatry* 45 (2): 163-197.

- Nielson, Elizabeth M., Darrick G. May, Alyssa A. Forcehimes, and Michael P. Bogenschutz. 2018. "The Psychedelic Debriefing in Alcohol Dependence Treatment: Illustrating Key Change Phenomena Through Qualitative Content Analysis of Clinical Sessions." *Frontiers in Pharmacology* 9: 132.
- Noller, Geoffrey E., Chris M. Frampton, and Berra Yazar-Klosinski. 2018. "Ibogaine Treatment Outcomes for Opioid Dependence from a Twelve-month Follow-up Observational Study." *The American Journal of Drug and Alcohol Abuse* 44 (1): 37-46.
- Noorani, Tehseen, Albert Garcia-Romeu, Thomas C. Swift, Roland Griffiths, and Matthew W. Johnson. 2018. "Psychedelic Therapy for Smoking Cessation: Qualitative Analysis of Participant Accounts." *Journal of Psychopharmacology* 32: 756-769.
- NORML. Nd. *States That Have Decriminalized*. <https://norml.org>.
- Nour, Matthew M., Lisa Evans, and Robin L. Carhart-Harris. 2017. "Psychedelics, Personality and Political Perspectives." *Journal of Psychoactive Drugs* 49 (3): 182–191.
- Nour, Matthew M., Lisa Evans, David Nutt, and Robin L. Carhart-Harris. 2016. "Ego-dissolution and Psychedelics: Validation of the Ego-dissolution Inventory (EDI)." *Frontiers in Human Neuroscience*: 269.
- Nutt, David. 2019. "New Psychoactive Substances: Pharmacology Influencing UK Practice, Policy and the Law." *British Journal of Clinical Pharmacology* 86: 445-451.
- Ogden, Laura A., Billy Hall, and Kimiko Tanita. 2013. "Animals, Plants, People, and Things: A Review of Multispecies Ethnography." *Environment and Society: Advances in Research* 4: 5-24.
- O’Keefe, Karen. 2013. "State Medical Marijuana Implementation and Federal Policy." *Journal of Health Care Law & Policy* 16: 39.
- Olson, Jay A., Léah Suissa-Rocheleau, Michael Lifshitz, Amir Raz, and Samuel P.L. Veissière. 2020. "Tripping on Nothing: Placebo Psychedelics and Contextual Factors." *Psychopharmacology* 237: 1371-1382.
- O’Malley, Pat and Mariana Valverde. 2004. "Pleasure, Freedom and Drugs: The Uses of ‘Pleasure’ in Liberal Governance of Drug and Alcohol Consumption." *Sociology* 38 (1): 25-42.
- Oram, Matthew. 2012. "Efficacy and Enlightenment: LSD Psychotherapy and the Drug Amendments of 1962." *Journal of the History of Medicine and Allied Sciences* 69 (2): 221-250.

- Ortner, Sherry B. 2016. "Dark anthropology and its Others: Theory Since the Eighties." *HAU: Journal of Ethnographic Theory* 6 (1): 47-73.
- Osório, Flávia de L., Rafael F. Sanches, Ligia R. Macedo, Rafael G. Dos Santos, João P. Maia-de-Oliveira, Lauro Wichert-Ana, Draulio B. De Araujo, Jordi Riba, José A. Crippa, and Jaime E. Hallak. "Antidepressant Effects of a Single Dose of Ayahuasca in Patients with Recurrent Depression: A Preliminary Report." *Brazilian Journal of Psychiatry* 37: 13-20.
- Oswald, David, Fred Sherratt, and Simon Smith. 2014. "Handling the Hawthorne Effect: The Challenges Surrounding a Participant Observer." *Review of Social Sciences* 1 (1): 53-73.
- Ot'abora, Marcela G., Jim Grigsby, Bruce Poulter, Joseph W. Van Derveer III, Sara Gael Giron, Lisa Jerome, Allison A. Feduccia, Scott Hamilton, Berra Yazar-Klosinski, Amy Emerson, Michael C. Mithoefer, and Rick Doblin. 2018. "3, 4-Methylenedioxymethamphetamine-assisted Psychotherapy for Treatment of Chronic Posttraumatic Stress Disorder: A Randomized Phase 2 Controlled Trial." *Journal of Psychopharmacology* 32 (2): 1295-1307.
- Páez, Dario, Bernard Rimé, Nekane Basabe, Anna Wlodarczyk, and Larraitz Zumeta. "Psychosocial Effects of Perceived Emotional Synchrony in Collective Gatherings." *Journal of Personality and Social Psychology* 108 (5): 711.
- Page, J. Bryan and Merrill Singer. 2010. "The Conduct of Drug Ethnography: Risks, Rewards, and Ethical Quandaries in Drug Research Careers." *Comprehending Drug Use: Ethnographic Research at the Social Margins*, 113-132. New Brunswick, NJ: Rutgers University Press.
- Palamar, Joseph J. and Austin Le. 2018. "Trends in DMT and Other Tryptamine Use Among Young Adults in the United States." *The American Journal on Addictions* 27 (7): 578-585.
- Palhano-Fontes, Fernanda, Dayanna Barreto, Heloisa Onias, Katia C. Andrade, Morgana M. Novaes, Jessica A. Pessoa, Sergio A. Mota-Rolim, Flávia L. Osório, Rafael Sanches, Rafael G. dos Santos, Fernando Tófoli, Gabriela do Oliveira Silvira, Mauricio Yonamine, Jordi Riba, Francisco R. Santos, Antonio A. Silva-Junior, João C. Alchieri, Nicole L. Galvão-Coelho, Bruno Labão-Soares, Jaime E. C. Jallak, Emerson Arcoverde, João P. Maia-de-Oliveira, and Bráulio B. Araújo. 2019. "Rapid Antidepressant Effects of the Psychedelic Ayahuasca in Treatment-Resistant Depression: A Randomized Placebo-Controlled Trial." *Psychological Medicine* 49: 655-663.
- Palmer, Catherine and Kirrilly Thompson. 2010. "Everyday Risks and Professional Dilemmas: Fieldwork with Alcohol-based (Sporting) Subcultures." *Qualitative Research* 10 (4): 421-440.
- Parsons, Michelle Anne. 2022. "Thinking About Social Determinants of Health Through the Relationality of Work and Drug Use." *Medical Anthropology Quarterly* 36 (2): 272-289.

- Pawelz, Janina. 2018. "Researching Gangs: How to Reach Hard-to-Reach Populations and Negotiate Tricky Issues in the Field." *Forum: Qualitative Social Research* 19 (1): 24.
- Peluso, Daniela, Emily Sinclair, Beatriz Labate, and Clancy Cavnar. 2020. "Reflections on Crafting an Ayahuasca Community Guide for the Awareness of Sexual Abuse." *Journal of Psychedelic Studies* 4: 24-33.
- Pendell, Dale. 2005. "Psychedelics, Deep Ecology, and Wild Mind." *MAPS Bulletin* 19 (1): 46-47.
- Peters, Roger H. and Marc L. Steinberg. 2013. "Substance Abuse Treatment in US Prisons." *Drug Use and Prisons: An International Perspective*, edited by David Shewan and John B. Davies, 89-116. Singapore: Harwood Academic Publishers.
- Petryna, Adriana. 2004. "Biological Citizenship: The Science and Politics of Chernobyl-Exposed Populations." *OSIRIS* 19: 25-265.
- Phillips David P., Todd E. Ruth, and Lisa M. Wagner. 1993. "Psychology and Survival." *The Lancet* 342: 1142-1145.
- Pine, Jason. 2016. "Last Chance Incorporated." *Cultural Anthropology* 31 (2): 297-318.
- Pizarro, José J., Nekane Basabe, Alberto Amutio, Saioa Telletxea, Miren Harizmendi, and William Van Gordon. 2020. "The Mediating Role of Shared Flow and Perceived Emotional Synchrony on Compassion for Others in a Mindful-dancing Program." *Mindfulness* 11 (1): 125-139.
- Plant, Sadie. 1999. *Writing on Drugs*. New York: Farrar, Straus and Giroux.
- Price, Rebecca B., Matthew K. Nock, Dennis S. Charney, and Sanjay J. Mathew. 2009. "Effects of Intravenous Ketamine on Explicit and Implicit Measures of Suicidality in Treatment-resistant Depression." *Biological Psychiatry* 66 (5): 522-526.
- Prochazkova, Luisa, Dominique P. Lippelt, Lorenza S. Colzato, Martin Kuchar, Zsuzsika Sjoerds, and Bernhard Hommel. 2018. "Exploring the Effect of Microdosing Psychedelics on Creativity in an Open-label Natural Setting." *Psychopharmacology* 235: 3401-3413.
- Rabinow, Paul. 1996. "Artificiality and Enlightenment: From Sociobiology to Biosociality." *Essays on the Anthropology of Reason*, edited by Paul Rabinow, 91-111. Princeton: Princeton University Press.
- Race, Kane. 2008. "The Use of Pleasure in Harm Reduction: Perspectives from the History of Sexuality." *International Journal of Drug Policy* 19: 417-423.

- Race, Kane. 2017. "Thinking with Pleasure: Experimenting with Drugs and Drug Research." *International Journal of Drug Policy* 49: 144-149.
- Rajagopal, Arvind. 2001. "Technologies of Perception and the Cultures of Globalization: Introduction." *Social Text* 3 (68): 1–8.
- Razam, Rak. 2014. *The Ayahuasca Sessions: Conversations with Amazonian Curanderos and Western Shamans*. Berkeley, CA: North Atlantic Books.
- Razoumnikova, Olga M. 2013. "Divergent Versus Convergent Thinking." *Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship*, edited by E.G. Carayannis, 546-552. New York: Springer.
- Redfield, Audrey. 2017. "An Analysis of the Experiences and Integration of Transpersonal Phenomena Induced by Electronic Dance Music." *International Journal of Transpersonal Studies* 36 (1): 67-80.
- Redfield, Audry and Marie I. Thouin-Savard. 2017. "Electronic Dance Music Events as Modern Day Ritual." *International Journal of Transpersonal Studies* 36 (1): 52-66.
- Reynolds, Simon. 1998. *Generation Ecstasy: Into the World of Techno and Rave Culture*. Boston, MA: Little, Brown and Company.
- Richards, Jared. 2019. "'Such a Disgrace': Secret Garden Artists Slam 'Intimidating' NSW Police Presence." *Junkee*. www.junkee.com.
- Rigg, Khary K. 2018. "MDMA (Ecstasy/Molly) Use Among African Americans: Patterns of Initiation." *International Journal of Mental Health and Addiction* 16: 662-671.
- Rigg, Khary K. and Maayan Lawental. 2018. "Perceived Risk Associated with MDMA (Ecstasy/Molly) Use Among African Americans: What Prevention and Treatment Providers Should Know." *Substance Use & Misuse* 53 (7): 1076-1083.
- Robbins, Joel. 2013. "Beyond the Suffering Subject: Toward an Anthropology of the Good." *Journal of the Royal Anthropological Institute* 19 (3): 447-462.
- Robinson, Randy. 2020. "Doctor Calls for 'Temporary Approval' of Psychedelics to Treat COVID-19 Trauma." *Merry Jane*. www.merryjane.com
- Room, Robin, Michael Agar, Jeremy Beckett, Linda A. Bennett, Sally Casswell, Dwight B. Heath, Joy Leland, Jerrold E. Levy, William Madsen, Mac Marshall, Jacek Moskalewicz, Juan Carlos Negrete, Miriam B. Rodin, Lee Sackett, Margaret Sargent, David Strug, and Jack O. Waddell. 1984. "Alcohol and Ethnography: A Case of Problem Deflation? [and Comments and Reply]." *Current Anthropology* 25 (2): 169-191.

- Roseman, Leor, David Nutt, and Robin L. Carhart-Harris. 2018. "Quality of Acute Psychedelic Experience Predicts Therapeutic Efficacy of Psilocybin for Treatment-resistant Depression." *Frontiers in Pharmacology* 8: 1-10.
- Roseman, Leor, Yiftach Ron, Antwan Saca, Natalie Ginsberg, Lisa Luan, Nadeem Karkabi, Rick Doblin, and Robin Carhart-Harris. 2021. "Relational Processes in Ayahuasca Groups of Palestinians and Israelis." *Frontiers in Pharmacology* 12: 1-18.
- Ross, Stephen, Anthony Bossis, Jeffrey Guss, Gabrielle Agin-Liebes, Tara Malone, Barry Cohen, Sarah E. Mennenga, Alexander Belser, Krystallia Kalliontzi, James Babb, Zhe Su, Patricia Corby, and Brian L. Schmidt. 2016. "Rapid and Sustained Symptom Reduction Following Psilocybin Treatment for Anxiety and Depression in Patients with Life-Threatening Cancer: A Randomized Controlled Trial." *Journal of Psychopharmacology* 30: 1165-1180.
- Ross, Anna, Gary R. Potter, Monica J. Barratt, and Judith A. Aldridge. 2020. "'Coming Out': Stigma, Reflexivity and the Drug Researcher's Drug Use." *Contemporary Drug Problems* 47 (4): 268-285.
- Rudgley, Richard. 1998. *The Encyclopedia of Psychoactive Substances*. New York: Thomas Dunne Books.
- Samorini, Giorgio. 1992. "The Oldest Representations of Hallucinogenic Mushrooms in the World (Sahara Desert, 9000-7000B.P.)." *Integration: Journal of Mind-moving Plants and Culture* 2 (3): 69-78.
- Sandberg, Sveinung and Heith Copes. 2012. "Speaking with Ethnographers: The Challenges of Researching Drug Dealers and Offenders." *Journal of Drug Issues* 43 (2): 176-197.
- Sandberg, Sveinung and Willy Pedersen. 2009. *Street Capital: Black Cannabis Dealers in a White Welfare State*. Bristol, UK: Policy Press.
- Saniotis, Arthur. 2010. "Evolutionary and Anthropological Approaches Towards Understanding Human Need for Psychotropic and Mood Altering Substances." *Journal of Psychoactive Drugs* 42 (4): 477-484.
- Saunders, Nicholas and Rick Doblin. 1996. *Ecstasy: Dance, Trance & Transformation*. Oakland: Quick American Archives.
- Savage, Charles, Ethel Savage, James Fadiman, and Willis Harman. 1964. "LSD: Therapeutic Effects of the Psychedelic Experience." *Psychological Reports* 14 (1): 111-120.
- Savidge, Thomas. 2019. "The Concentration of Power in a Single Hand: Administrative Centralization and State and Local Drug Enforcement Policy in the United States, 1995-2016." *The Journal of Private Enterprise* 34 (2): 65-80.

- Schenberg, Eduardo Ekman, Luis Fernando Tofoli, Daniel Rezinovsky, and Dartiu Xavier da Silveira. 2017. "Translation and Cultural Adaptation of the States of Consciousness Questionnaire (SOCQ) and Statistical Validation of the Mystical Experience Questionnaire (MEQ30) in Brazilian Portuguese." *Archives of Clinical Psychiatry (São Paulo)* 44: 1-5.
- Schensul, Jean J. and Margaret D. LeCompte. 2013. *Essential Ethnographic Methods: A Mixed Methods Approach*, 2nd Ed. Lanham: AltaMira Press.
- Scheper-Hughes, Nancy and Margaret M. Lock. 1987. "The Mindful Dody: A Prolegomenon to Future Work in Medical Anthropology." *Medical Anthropology Quarterly* 1 (1): 6-41.
- Schlicht Justin, Martin Mitcheson, and Mel Henry. 1972. "Medical Aspects of Large Outdoor Festivals." *The Lancet* 1 (7757): 948–952.
- Schultes, Richard Evans and Albert Hofmann. 1992. *Plants of the Gods: Their Sacred, Healing and Hallucinogenic Powers*. Rochester, VT: Healing Arts Press.
- Seligman, Rebecca. 2005. "Distress, Dissociation, and Embodied Experience: Reconsidering the Pathways to Mediumship and Mental Health." *Ethos* 33 (1): 71-99.
- Sepeda, Nathan D., John M. Clifton, Laura Y. Doyle, Rafael Lancelotta, Roland R. Griffiths, and Alan K. Davis. 2020. "Inhaled 5-methoxy-N,N-dimethyltryptamine: Supportive Context Associated with Positive Acute and Enduring Effects." *Journal of Psychedelic Studies* 4 (2): 114–122.
- Sepie, Amba J. 2017. "More Than Stories, More Than Myths: Animal/Human/Nature(s) in Traditional Ecological Worldviews." *Humanities* 6 (4): 78.
- Sessa, Ben. 2012. *The Psychedelic Renaissance: Reassessing the Role of Psychedelic Drugs in the 21st Century Psychiatry and Society*. London: Muswell Hill Press.
- Sewell, R. Andrew, John H. Halpern, and Harrison G. Pope Jr. 2006. "Response of Cluster Headache to Psilocybin and LSD." *Neurology* 66 (12): 1920–1922.
- Shapiro, Nicholas and Eben Kirksey. 2017. "Chemo-Ethnography: An Introduction." *Cultural Anthropology* 32 (4): 481-493.
- Sheldrake, Merlin. 2021. *Entangled Life: How Fungi Make our Worlds, Change our Minds & Shape our Futures*. Random House Trade Paperbacks.
- Silva, F., R. G. Heath, T. Rafferty, R. Johnson, and W. Robinson. 1960. "Comparative Effects of the Administration of Taraxein, d-LSD, Mescaline, and Psilocybin to Human Volunteers." *Comprehensive Psychiatry* 1 (6): 370-376.
- Sjöstedt-H, Peter. 2015. "Philosophy and Psychedelic Phenomenology." *Psychedelic Press UK*.

- Smart, Alan. 2011. "The Humanism of Postmodernist Anthropology and the Post-structuralist Challenges of Posthumanism." *Anthropologica* 53 (2): 332-334.
- Smith, J. Jerome. 1993. "Using ANTHOPAC 3.5 and a Spreadsheet to Compute a Free-list Saliency Index." *CAM* 5 (3): 1-3.
- Snodgrass, Jeffrey G. 2023. *The Avatar Faculty: Ecstatic Transformations in Religion and Video Games*. University of California Press.
- Soler, Joaquim, Matilde Elices, Alba Franquesa, Steven Barker, Pablo Friedlander, Amanda Feilding, Juan C. Pascual, and Jordi Riba. 2016. "Exploring the Therapeutic Potential of Ayahuasca: Acute Intake Increases Mindfulness-related Capacities." *Psychopharmacology* 233: 823-829.
- St John, Graham. 2009. *Technomad: Global Raving Countercultures*. Sheffield: Equinox.
- Stein, Daniel and Anthony M. Grant. 2014. "Disentangling the Relationships Among Self-reflection, Insight and Subjective Well-being: The Role of Dysfunctional Attitudes and Core Self-evaluations." *The Journal of Psychology* 148 (5): 505–522.
- Stewart, Omer C. 1987. *The Civilization of the American Indian Series*. Norman: University of Oklahoma Press.
- Stromberg, Peter G. 2009. *Caught in Play: How Entertainment Works on You*. Stanford University Press.
- Swift, Thomas C., Alexander B. Belser, Gabrielle Agin-Liebes, Nese Devenot, Sara Terrana, Harris L. Fridman, Jeffrey Guss, Anthony P. Bossis, and Stephen Ross. 2017. "Cancer at the Dinner Table: Experiences of Psilocybin-Assisted Psychotherapy for the Treatment of Cancer-Related Distress." *Journal of Humanistic Psychology* 57: 488-519.
- Sylvan, Robin. 2005. *Trance Formation: The Spiritual and Religious Dimensions of Global Rave Culture*. New York, NY: Routledge.
- Takahashi, Melani and Tim Olaveson. 2003. "Music, Dance and Raving Bodies: Raving as Spirituality in the Central Canadian Rave Scene." *Journal of Ritual Studies* 17 (2): 72-96.
- Talin, Piera. 2012. "Santo Daime tra Amazzonia e Occidente: vita comunitaria e spiritualità alla base di nuovi legami familiari sociali." *XXXV Congresso Internacional de Americanistica*.
- Talin, Piera and Emilia Sanabria. 2017. "Ayahuasca's Entwined Efficacy: An Ethnographic Study of Ritual Healing from 'Addiction'." *International Journal of Drug Policy* 44: 23-30.

- The Controlled Substances Act (Comprehensive Drug Abuse and Control Act) §801. 1970.
- The Domestic Council Drug Abuse Task Force. 1975. *White Paper on Drug Abuse: A Report to the President*. US Government Printing Office.
- The Sentencing Project. 2013. *A Lifetime of Punishment: The Impact of the Felony Drug Ban on Welfare Benefits*. www.sentencingproject.org.
- The Sentencing Project. 2014. *Fact Sheet: Felony Disenfranchisement*. www.sentencingproject.org.
- Thomas, David R. 2006. "A General Inductive Approach for Analyzing Qualitative Evaluation Data." *American Journal of Evaluation* 27 (2): 237-246.
- Thomas, Gerald, Philippe Lucas, N. R. Capler, Kenneth W. Tupper, and Gina Martin. 2013. "Ayahuasca-assisted Therapy for Addiction: Results from a Preliminary Observational Study in Canada." *Current Drug Abuse Reviews* 6: 30-42.
- Thornton, Sarah. 1995. *Club Cultures: Music, Media and Subculture Capital*. Cambridge, MA: Polity Press.
- Ticktin, Miriam. 2006. "Where Ethics and Politics Meet: The Voice of Humanitarianism in France." *American Ethnologist* 33 (1): 33-49.
- Tinasti, Khalid. 2018. "Toward the End of the Global War on Drugs." *Brown Journal of World Affairs* 25: 109-120.
- Tomlinson, Lori. 1998. "'This Ain't No Disco'...or is it? Youth Culture and the Rave Phenomenon." *Youth Culture: Identity in a Postmodern World*, edited by J. Epstein, 195-211. Malden, MA: Blackwell Publishing.
- Tramacchi, Des. 2000. "Field Tripping: Psychedelic Communitas and Ritual in the Australian Bush." *Journal of Contemporary Religion* 15 (2): 201-213.
- Treacy, Erin. 2005. "The RAVE Act: A Specious Solution to the Serious Problem of Increased Ecstasy Distribution: Is it Unconstitutionally Overbroad?" *Hastings Communications and Entertainment Law Journal* 28 (229): 229-286.
- Trichter, Stephen. 2010. "Ayahuasca Beyond the Amazon: The Benefits and Risks of Spreading Tradition." *The Journal of Transpersonal Psychology* 42 (2): 131-148.
- Tsing, Anna Lowenhaupt. 2012. "Unruly Edges: Mushrooms as Companion Species." *Environmental Humanities* 1: 141-154.
- Tsing, Anna Lowenhaupt. 2015. *The Mushroom at the End of the World*. Princeton University Press.

- Tupper, Kenneth W. and Beatriz C. Labate. 2014. "Ayahuasca, Psychedelic Studies and Health Sciences: The Politics of Knowledge and Inquiry into an Amazonian Plant Brew." *Current Drug Abuse Reviews* 7: 71-80.
- Turner, Victor. 1969. *The Ritual Process: Structure and Anti-Structure*. Chicago: Aldine.
- Tylš, Filip, Tomáš Páleníček, and Jirí Horáček. 2014. "Psilocybin – Summary of Knowledge and New Perspectives." *European Neuropsychopharmacology* 24: 342-356.
- UMIYAC (The Union of Indigenous Yagé Medics of the Colombian Amazon). 2019. *Declaration About Cultural Appropriation from the Spiritual Authorities, Representatives and Indigenous Organizations of the Amazon Region*. www.umiyac.org.
- Unger, Sanford M. 1963. "Mescaline, LSD, Psilocybin, and Personality Change." *Journal for the Study of Interpersonal Processes* 26 (2): 111-125.
- United Nations (UN). 1971. *Convention on Psychotropic Substances*. New York: United Nations.
- United Nations (UN). 1988. *United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances*. New York: United Nations.
- UNODC (United Nations Office on Drugs and Crime). 2008. *World Drug Report 2008*.
- UNODC (United Nations Office on Drugs and Crime). 2010. *World Drug Report 2010*.
- UNODC (United Nations Office on Drugs and Crime). 2012. *World Drug Report 2012*.
- US Department of Justice. 2014. "Drug Enforcement Administration, Office of Diversion Control." *Controlled Substance Schedules*. www.deadiversion.usdoj.gov.
- US Department of State. 2013. *International Narcotics Control Strategy Report*.
- Uthaug, M. V., Rafael Lancelotta, K. Van Oorsouw, K. P. C. Kuypers, Natasha Mason, Justyna Rak, A. Šuláková, R. Jurok, M. Maryška, M. Kuchař, and T. Páleníček. 2019. "A Single Inhalation of Vapor from Dried Toad Secretion Containing 5-methoxy-N, N-dimethyltryptamine (5-MeO-DMT) in a Naturalistic Setting is Related to Sustained Enhancement of Satisfaction with Life, Mindfulness-related Capacities, and a Decrement of Psychopathological Symptoms." *Psychopharmacology* 236: 2653-2666.
- Uthaug, M. V., K. Van Oorsouw, K. P. C. Kuypers, M. Van Boxtel, N. J. Broers, N. L. Mason, S. W. Toennes, J. Riba, and J. G. Ramaekers. 2018. "Sub-acute and Long-term Effects of Ayahuasca on Affect and Cognitive Thinking Style and Their Association with Ego Dissolution." *Psychopharmacology* 235: 2979-2989.

- Valentine, Kyle and Suzanne Fraser. 2007. "Trauma, Damage and Pleasure: Rethinking Problematic Drug Use." *International Journal of Drug Policy* 19: 410-416.
- Van der Geest, Sjaak and Susan Reynolds Whyte. 1989. "The Charm of Medicines: Metaphors and Metonyms." *Medical Anthropology Quarterly* 3 (4): 345-367.
- Van der Geest, Sjaak, Susan Reynolds Whyte, and Anita Hardon. 1996. "The Anthropology of Pharmaceuticals: A Biographical Approach." *Annual Review of Anthropology* 25: 153-178.
- Varley, Jenna. 2019. "Psychedelic-assisted Therapy for Anxiety and Depression in the Face of Death: A Critical Review with an Anthropological Lens." *Journal of Psychedelic Studies* 3 (1): 14-18.
- Vindrola-Padros, Cecilia and Ginger A. Johnson. 2014. "The Narrated, Nonnarrated, and the Disnarrated: Conceptual Tools for Analyzing Narratives in Health Services Research." *Advancing Qualitative Methods* 24 (11): 1603-1611.
- Vitos, Botond. 2017. "Go Out on the Weekends to the Forest, Get Trashed and Dance': Residual Behaviors and Reconfigured Environments at Psychedelic Trance Festivals." *Leisure Sciences* 39 (6): 543-560.
- Walach, Harald. 2015. "Reconstructing the Meaning Effect: The Capacity to Self-Heal Emerges from the Placebo Concept." *Tidsskrift for Forskning i Sygdom og Samfund* 12 (23): 111-139.
- Walker, Lucy and Alison Elwood. 2022. *How to Change Your Mind*. Netflix.
- Wallace, Anthony F.C. 1959. "Cultural Determinants of Response to Hallucinatory Experience." *AMA Archives of General Psychiatry* 1 (1): 58-69.
- Warrior, Robert. 1999. "The Native American Scholar: Toward a New Intellectual Agenda." *Wicazo Sa Review* 14 (2): 46-54.
- Wasson, Gordon R. 1957. "Secret of 'Devine Mushrooms.'" *Life Magazine*.
- Watson, Lynne and Jerome Beck. 1991. "New Age Seekers: MDMA Use as an Adjunct to Spiritual Pursuit." *Journal of Psychoactive Drugs* 23 (3): 261-270.
- Watson, Stanley J., John A. Benson Jr., and Janet E. Joy. 2000. *Marijuana and Medicine: Assessing the Science Base*. Washington, D.C.: National Academics Press.
- Watts, Alan. 1962. *The Joyous Cosmology*. New York: Pantheon.

- Watts, Rosalind, Camilla Day, Jacob Krzanowski, David Nutt, and Robin Carhart-Harris. 2017. "Patients' Accounts of Increased 'Connectedness' and 'Acceptance' After Psilocybin for Treatment-Resistant Depression." *Journal of Humanistic Psychology* 57 (5): 520-564.
- Wedel, Janine R., Cris Shore, Gregory Feldman, and Stacy Lathrop. 2005. "Toward and Anthropology of Public Policy." *The Annals of the American Academy* 600: 30-51.
- Wheeler, Spencer W. and Natalie L. Dyer. 2020. "A Systematic Review of Psychedelic-Assisted Psychotherapy for Mental Health: An Evaluation of the Current Wave of Research and Suggestions for the Future." *Psychology of Consciousness: Theory, Research, and Practice* 7 (3): 1-37.
- White, Bethany, Louisa Degenhardt, Courtney Breen, Raimondo Bruno, Jaclyn Newman, and Phoebe Proudfoot. 2006. "Risk and Benefit Perceptions of Party Drug Use." *Addictive Behaviors* 31: 137-142.
- White House. 2011. *National Drug Control Strategy*. Washington, D.C.
- Whiteford, Linda and Robert T. Trotter. 2008. *Ethics for Anthropological Research and Practice*. Long Grove, IL: Waveland Press.
- Whyte, Susan Reynolds, Sjaak van der Geest, and Anita Hardon. 2002. *Social Lives of Medicine*. Cambridge: Cambridge University Press.
- Wikan, Unni. 1991. "Toward and Experience-near Anthropology." *Cultural Anthropology* 6 (3): 285-305.
- Williams, Keith, Osiris Sinuhé González Romero, Michelle Braunstein, and Suzanne Brant. 2022. "Indigenous Philosophies and the 'Psychedelic Renaissance'." *Anthropology of Consciousness* 33 (2): 506-527.
- Winkelman, Michael. 1996. "Psychointegrator Plants: Their Roles in Human Culture, Consciousness and Health." *Sacred Plants, Consciousness, and Healing: Cross-cultural and Interdisciplinary Perspectives*, edited by Michael Winkelman. Berlin: Verlag für Wissenschaft und Bildung.
- Winkelman, Michael. 2005. "Drug Tourism or Spiritual Healing? Ayahuasca Seekers in Amazonia." *Journal of Psychoactive Drugs* 37 (2): 209-218.
- Winkelman, Michael. 2010. "The Shamanic Paradigm: Evidence from Ethnology, Neuropsychology and Ethology." *Time and Mind: The Journal of Archaeology, Consciousness and Culture* 3 (2): 159-182.
- Winstock, A.R., P. Griffiths, and D. Stewart. 2001. "Drugs and the Dance Music Scene: A Survey of Current Drug Use Patterns Among a Sample of Dance Music Enthusiasts in the UK." *Drug and Alcohol Dependence* 64: 9-17.

- Wlodarczyk, Anna, Larraitz Zumeta, José Joaquin Pizarro, Pierre Bouchat, Fuad Hatibovic, Nekane Basabe, and Bernard Rimé. 2020. "Perceived Emotional Synchrony in Collective Gatherings: Validation of a Short Scale and Proposition of an Integrative Measure." *Frontiers in Psychology* 11: 1-13.
- Wolfe, Cary. 2010. *What is Posthumanism?* Vol. 8. Minneapolis, MN: University of Minnesota Press.
- Wu, Edward T.H. 2020. "Quantum Entanglement and Hidden Variables Interpreted by Yangton and Yington Theory." *IOSR Journal of Applied Physics* 12 (2): 39-46.
- Yockey, R. Andrew, Rebecca A. Vidourek, and Keith A. King. 2020. "Trends in LSD Use Among US Adults: 2015-2018." *Drug and Alcohol Dependence* 212: 1-4.
- Zinberg, Norman E. 1984. *Drug, Set, and Setting*. New Haven: Yale University Press.

APPENDIX I: SEMI-STRUCTURED INTERVIEW GUIDE

Qualifying questions

1. Are you age 18 or older?
2. Have you had a transformative psychedelic experience at a music event?
3. Was the music event in the United States?
4. Did this experience occur while under the influence of LSD, psilocybin, MDMA/MDA, ketamine or any combination of those substances?

Demographics

1. How old are you?
2. What gender do you identify as?
3. How would you describe your ethnicity?
4. What is the highest degree or level of education you have completed?
5. What is your marital status?
6. What is your current employment status?
7. What is your estimated annual household income?
8. How would you describe your religion or spirituality?
9. How would you describe your level of religiosity or spirituality?
10. How would you describe your political orientation?

Past Drug Experiences

1. What was your first drug experience?
 - i. What substance was it?
 - ii. How old were you?
2. What was your first psychedelic experience?
 - i. What substance was it?
 - ii. How old were you?
3. LSD
 - i. How old were you when you first consumed LSD?
 - ii. How frequently do you use LSD at music events?
 - iii. What changes, if any, have you made in the frequency or amount of LSD you take since you first started taking it?
 - iv. Where do you prefer to take LSD?
4. Psilocybin
 - i. How old were you when you first consumed psilocybin?
 - ii. How frequently do you use psilocybin at music events?
 - iii. What changes, if any, have you made in the frequency or amount of psilocybin you take since you first started taking it?
 - iv. Where do you prefer to take psilocybin?
5. MDMA/MDA

- i. How old were you when you first consumed MDMA/MDA?
 - ii. How frequently do you use MDMA/MDA at music events?
 - iii. What changes, if any, have you made in the frequency or amount of MDMA/MDA you take since you first started taking it?
 - iv. Where do you prefer to take MDMA/MDA?
6. Ketamine
- i. How old were you when you first consumed ketamine?
 - ii. How frequently do you use ketamine at music events?
 - iii. What changes, if any, have you made in the frequency or amount of ketamine you take since you first started taking it?
 - iv. Where do you prefer to take ketamine?
7. Where do you get information about the different substances you use?
8. How often do you test your substances using a reagent test kit before taking them?

Transformative Psychedelic Experiences at music events

9. Tell me about you most transformative psychedelic experience at a music event?
- i. Start with a general timeline of events and consider who, what, where, when, why, and how.
 - ii. What was your intention of taking this psychedelic in this instance?
 - iii. Tell me about where you were, who you were with, and what you were doing while you took the psychedelic.
 - 1. What did you take?
 - 2. How much did you take?
 - 3. Where were you?
 - iv. Tell me about the things you did while on the psychedelic.
 - v. Describe to me the most heightened part of the experience.
 - 1. Physical sensations (touch, taste, smell, sound, see)
 - 2. Mental thoughts
 - vi. Why did you choose to take this particular substance, in this particular location, at this particular time?
 - vii. What things do you think contributed to creating the psychedelic experience you had at that time?
 - viii. Now that the experience is past, has the experience continued to impact you or be transformative to you? If so, how?
 - ix. What about this experience makes it transformative for you?
10. Have you ever had transformative psychedelic experiences outside of music events? If so, can you briefly describe them to me.
11. Have you ever had transformative experiences without the use of psychedelics? If so, can you briefly describe them to me.
12. How would you define transformative when talking about transformative psychedelic experiences?

Conclusion

13. Is there anything you would like to add?

APPENDIX II: QUANTITATIVE SURVEY

Consent

Q1. Consent Form Script

Q2. Do you consent to participate in this survey?

1 = Yes

1 = No

Q3. Are you age 18 or older?

1 = Yes

2 = No

Q4. Have you had at least one transformative psychedelic experience at a music event? For the purpose of this study, transformative means a psychedelic experience that created some kind of change in your life.

1 = Yes

2 = No

Q5. Did this transformative psychedelic experience occur under the influence of LSD (acid), psilocybin (mushrooms), MDMA/MDA (ecstasy, molly, sass), ketamine (k), or any combination of these substances?

1 = Yes

2 = No

Demographics

Q6. This section asks you basic questions about yourself.

Q7. What is your age?

Textbox

Q8. What gender do you identify as?

1= Male

2= Female

3 = Non-binary/third gender

4 = Prefer not to answer

5 = Other

5_TEXT = Text

Q9. How would you describe your ethnicity? Please choose all that apply.

- 1 = African-American/Black
- 2 = Asian
- 3 = Caucasian
- 4 = Latinx or Hispanic
- 5 = Native American
- 6 = Native Hawaiian or Pacific Islander
- 7 = Unknown
- 8 = Prefer not to say
- 9 = Other

Q10. What is your marital status?

- 1 = Single (never married)
- 2 = Married or in a domestic partnership
- 3 = Separated
- 4 = Divorced
- 5 = Widowed

Q11. What is the highest level of education you have completed?

- 1 = No Education
- 2 = Some High School (no diploma or GED)
- 3 = High School Diploma/GED
- 4 = Trade School
- 5 = Some College or University (no degree)
- 6 = Associate's Degree
- 7 = Bachelor's Degree
- 8 = Master's Degree
- 9 = Ph.D. or other Professional Degree
- 10 = Prefer not to say

Q12. What is your current employment status? Please choose all that apply.

- 1 = Employed full time (40 or more hours per week)
- 2 = Employed part-time (up to 39 hours per week)
- 3 = Unemployed
- 4 = Full-time student
- 5 = Part-time student
- 6 = Retired
- 7 = Unable to work
- 8 = Self-employed

Q13. What is your approximate annual income?

- 1 = Less than \$25,000
- 2 = \$25,000-\$50,000
- 3 = \$50,000-\$75,000
- 4 = \$75,000-\$100,000
- 5 = \$100,000-\$125,000
- 6 = \$125,000-\$150,000
- 7 = \$150,000-\$175,000
- 8 = \$175,000-\$200,000
- 9 = More than \$200,000
- 10 = Prefer not to say

Q14. If applicable, please specify your current religion or spiritual practice. Please choose all that apply.

- 1 = Catholicism/Christianity
- 2 = Judaism
- 3 = Islam
- 4 = Buddhism
- 5 = Hinduism
- 6 = Atheist (belief there is no god)
- 7 = Agnostic (neither belief nor disbelief there is a god)
- 8 = Not religious or spiritual
- 9 = Prefer not to say
- 10 = Other

Q15. How would you describe your current level of religiosity or spirituality? (0 being not religious or spiritual to 10 being very religious or spiritual)

- 0 = Not religious/spiritual
- 10 = Very religious/spiritual

Q16. How would you describe your political orientation? (0 being strongly liberal to 10 being strongly conservative)

- 0 = Liberal
- 10 = Conservative

Tier 1 Questions

Q17. This section asks some basic questions about your psychedelic experiences

Q18. How many music events have you attended in your lifetime? This can include multi-day music festivals and single-day shows. Each multi-day music festival and each single-day show count as a single event.

1 = 1-5

2 = 6-10

3 = 11-15

4 = 16-20

5 = 21-25

6 = 26-30

7 = 31-35

8 = 36+

Q19. Of all the music events you have attended in your lifetime, how many of them have you had psychedelic experiences at?

1 = 1-5

2 = 6-10

3 = 11-15

4 = 16-20

5 = 21-25

6 = 26-30

7 = 31-35

8 = 36+

Q20. Of all the psychedelic experiences you have had at music events in your lifetime, how many of these experiences would you consider to be transformative to you? For the purpose of this study, transformative means a psychedelic experience that created some kind of change in your life.

1 = 1-5

2 = 6-10

3 = 11-15

4 = 16-20

5 = 21-25

6 = 26-30

7 = 31-35

8 = 36+

Q21. When answering the next several questions, please consider your most transformative psychedelic experience at a music event. For the purpose of this study, transformative means a psychedelic experience that created some kind of change in your life.

Q22. What state was the music festival held in where you had your most transformative psychedelic experience? If the event was outside of the United States, please select "Outside the United States"

- 1 = Alabama
- 2 = Alaska
- 3 = Arizona
- 4 = Arkansas
- 5 = California
- 6 = Colorado
- 7 = Connecticut
- 8 = Delaware
- 9 = District of Columbia (DC)
- 10 = Florida
- 11 = Georgia
- 12 = Hawaii
- 13 = Idaho
- 14 = Illinois
- 15 = Indiana
- 16 = Iowa
- 17 = Kansas
- 18 = Kentucky
- 19 = Louisiana
- 20 = Maine
- 21 = Maryland
- 22 = Massachusetts
- 23 = Michigan
- 24 = Minnesota
- 25 = Mississippi
- 26 = Missouri
- 27 = Montana
- 28 = Nebraska
- 29 = Nevada
- 30 = New Hampshire
- 31 = New Jersey
- 32 = New Mexico
- 33 = New York
- 34 = North Carolina
- 35 = North Dakota
- 36 = Ohio
- 37 = Oklahoma
- 38 = Oregon
- 39 = Pennsylvania
- 40 = Rhode Island
- 41 = South Carolina
- 42 = South Dakota
- 43 = Tennessee

- 44 = Texas
- 45 = Utah
- 46 = Vermont
- 47 = Virginia
- 48 = Washington
- 49 = West Virginia
- 50 = Wisconsin
- 51 = Wyoming
- 52 = Another US state or territory
- 53 = Outside the United States

Q23. How would you best describe the music event you attended where you had your most transformative experience?

- 1 = Large multi-day music festival (over 25,000 people)
- 2 = Medium multi-day music festival (5,000 - 25,000 people)
- 3 = Small multi-day music festival (under 5,000 people)
- 4 = Single day music concert
- 5 = Underground rave
- 6 = Other (please specify)
- 6_TEXT = text

Q24. What is the approximate date (month/year) of this experience?

Textbox

Q25. Did you consume LSD (acid) for this experience?

- 1 = Yes
- 2 = No

Q26. How much LSD (acid) did you consume for this experience? If you're not sure of the exact amount, please provide your best estimate. If you took more than one dose, please specify the amounts for each dose and redose.

Textbox

Q27. Did you consume psilocybin (mushrooms) for this experience?

- 1 = Yes
- 2 = No

Q28. How much psilocybin (mushrooms) did you consume for this experience? If you're not sure of the exact amount, please provide your best estimate. If you took more than one dose, please specify the amounts for each dose and redose.

Textbox

Q29. Did you consume MDMA/MDA (ecstasy, molly, sass) for this experience?

- 1 = Yes
- 2 = No

Q30. How much MDMA/MDA (ecstasy, molly, sass) did you consume for this experience? If you're not sure of the exact amount, please provide your best estimate. If you took more than one dose, please specify the amounts for each dose and redose.

Textbox

Q31. Did you consume ketamine (k) for this experience?

1 = Yes

2 = No

Q32. How much ketamine (k) did you consume for this experience? If you're not sure of the exact amount, please provide your best estimate. If you took more than one dose, please specify the amounts for each dose and redose.

Textbox

Q33. Please rank the TOP 3 factors you believe were the most influential in making your psychedelic experience transformative.

Q33_1: How I felt emotionally

Q33_2: How I felt physically

Q33_3: The music

Q33_4: The art

Q33_5: Sociability

Q33_6: Connection to the universe or feelings of oneness

Q33_7: Ego dissolution

Q33_8: Philosophical contemplation

Q33_9: Dose of drug

Q33_10: The drug itself

Q33_11: My physical environment (please specify)

Q33_11_TEXT = text

Q33_12: Other (please specify)

Q33_12_TEXT = text

Q34. Now that the experience has passed, how long has this transformative psychedelic experience impacted you outside of the experience?

1 = One day

2 = One week

3 = Several weeks

4 = A month

5 = Several months

6 = A year

7 = Several years

8 = I'm still impacted by this experience

Tier 2 - Questionnaires

Q35. For this next set of questions please look back on your most transformative psychedelic experience at a music event. For the purpose of this study, transformative means a psychedelic experience that created some kind of change in your life. While thinking of this particular experience please rate the degree to which at any time during the experience you had the following phenomena. Answer each question according to your feelings, thoughts and experiences at the time of the experience.

Rating Scale:

0 = none/not at all

1 = so slight I cannot decide

2 = slight

3 = moderate

4 = strong (equivalent in degree to any other strong experience)

5 = extreme (more than any other time in my life and stronger than 4)

Mystical Experience Questionnaire

Q36_1. Loss of your usual sense of time (T)

Q36_2. Experience of amazement (P)

Q36_3. Sense that the experience cannot be described adequately in words (I)

Q36_4. Gain of insightful knowledge experience at an intuitive level (M)

Q36_5. Feeling that you experienced eternity or infinity (M)

Q36_6. Experience of oneness or unity with the objects and/or persons perceived in your surroundings (M)

Q36_7. Loss of your usual sense of space (T)

Q36_8. Feelings of tenderness and gentleness (P)

Q37_1. Certainty of encounter with ultimate reality (in the sense of being able to 'know' and 'see' what is really real at some point during your experience) (M)

Q37_2. Feeling that you could not do justice to your experience by describing it in words (I)

Q37_3. Loss of your usual sense of where you were (T)

Q37_4. Feelings of peace and tranquility (P)

Q37_5. Sense of being 'outside of' time, beyond past and future (T)

Q37_6. Freedom from the limitations of your personal self and feeling of unity or bond with what was felt to be greater than your personal self (M)

Q37_7. Sense of being at a spiritual height (M)

Q37_8. Experience of pure being and pure awareness (beyond the world of sense impressions) (M)

Q38_1. Experience of ecstasy (P)

Q38_2. Experience of the insight that "all is one" (M)

Q38_3. Being in a realm with no space boundaries (T)

Q38_4. Experience of oneness in relation to an "inner world" within (M)

Q38_5. Sense of reverence (M)

Q38_6. Experience of timelessness (T)

Q38_7. You are convinced now, as you look back on your experience, that in it you encountered ultimate reality (that you 'knew' and 'saw' what was really real) (M)

Q39_1. Feeling that you experienced something profoundly sacred and holy (M)

Q39_2. Awareness of the life or living presence in all things (M)

Q39_3. Experience of the fusion of your personal self into a larger whole (M)

Q39_4. Sense of awe or awesomeness (P)

Q39_5. Experience of unity with ultimate reality (M)

Q39_6. Feeling that it would be difficult to communicate your own experience to others who have not had similar experiences (I)

Q39_7. Feelings of joy (P)

Psychological Insight Questionnaire

Q40_1. Awareness of uncomfortable or painful feelings I previously avoided (AMP)

Q40_2. Realized the importance of my life (GAP)

Q40_3. Discovered I could explore uncomfortable or painful feelings I previously avoided (AMP)

- Q40_4. Awareness of information that helped me understand my life (GAP)
- Q40_5. Awareness of dysfunctional patterns in my actions, thoughts, and/or feelings (AMP)
- Q40_6. Discovered a vivid sense of the paradoxes in my life (GAP)
- Q41_1. Realized the nature and/or origins of my defenses or other coping strategies (AMP)
- Q41_2. Awareness of my life purpose, goals, and/or priorities (GAP)
- Q41_3. Realized how current feelings or perceptions are related to events from my past (AMP)
- Q41_4. Discovered a clear pattern of avoidance in my life (AMP)
- Q41_5. Discovered new actions that may help me achieve my goals (GAP)
- Q41_6. Gained resolution or clarity about past traumas or hurtful events (AMP)
- Q42_1. Experienced validation of my life, character, values, or beliefs (GAP)
- Q42_2. Gained a deeper understanding of events/memories from my past (AMP)
- Q42_3. Realized I could experience memories previously too difficult to experience (AMP)
- Q42_4. Gained a deeper understanding of previously held beliefs and/or values (GAP)
- Q42_5. Discovered how aspects of my life are affecting my well-being (AMP)
- Q42_6. Realized ways my beliefs may be dysfunctional (AMP)
- Q43_1. Discovered clear similarities between my past and present interpersonal relationships (AMP)
- Q43_2. Discovered new insights about my work or career (GAP)
- Q43_3. Realized how critical or judgmental views I hold towards myself are dysfunctional (AMP)
- Q43_4. Awareness of beneficial patterns in my actions, thoughts, and/or feelings (GAP)

Tier 3 – Open-Ended Questions

Q44. Please consider your experience with taking psychedelics while answering the following questions.

Q45. Who would you go to if you wanted to get more information about types of substances to use (dose, how to use, drug effects and combinations, etc.)? Please choose all that apply.

1 = There is no one I can talk to about this

2 = My family

3 = My significant other

4 = My friends

5 = The internet (Erowid, blogs)

6 = An organization that provides information (ex. DanceSafe, Bunk Police)

7 = Other (please specify)

Q46. How often do you test your substances using a reagent test kit before taking them?

1 = Never

2 = About a quarter of the time

3 = About half the time

4 = About three-quarters of the time

5 = Every time

Q47. Please consider your most transformative psychedelic experience at a music event while answering the following questions. For the purpose of this study, transformative means a psychedelic experience that created some kind of change in your life. Please be as detailed as possible when responding.

Q48. Please describe the context of your most transformative psychedelic experience. Consider where you were when you took each substance (campsite, set, vendors, bathroom) and each dose, who you were with, what you were doing, and your mental state before and during the experience.

Textbox

Q49. Please describe the timeline of events of the most intense part of your experience.

Textbox

Q50. Please describe all of the physical and emotional sensations you had during the MOST INTENSE PART of the experience.

Textbox

Q51. What about your experience makes it transformative for you?

Textbox

Q52. Are there any other details or information you want to share with the researchers about this experience?

Textbox

Q53. Would you be interested in completing a 1-3 hour interview to share and discuss further your transformative psychedelic experience(s) at music festivals?

1 = Yes

2 = No

APPENDIX III: IRB APPROVAL LETTER



APPROVAL

April 7, 2021

Dear Gabrielle Lehigh:

On 4/7/2021, the IRB reviewed and approved the following protocol:

Application Type:	Initial Study
IRB ID:	STUDY002064
Review Type:	Expedited 6, 7
Title:	Transformative Psychedelic Experiences at Music Events: Using Subjective Experience to Explore Chemosocial Assemblages of Culture
Approved Protocol and Consent(s):	<ul style="list-style-type: none">• Protocol V1;• Survey Consent V1;• Verbal Consent V1; <p>Approved study documents can be found under the 'Documents' tab in the main study workspace. Use the stamped consent found under the 'Last Finalized' column under the 'Documents' tab.</p>

Within 30 days of the anniversary date of study approval, confirm your research is ongoing by clicking Confirm Ongoing Research in BullsIRB, or if your research is complete, submit a study closure request in BullsIRB by clicking Create Modification/CR.

Your study qualifies for a waiver of the requirements for the documentation of informed consent for interviews and surveys as outlined in the federal regulations at 45 CFR 46.117(c).

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

Jennifer Walker
IRB Research Compliance Administrator

Institutional Review Boards / Research Integrity & Compliance

FWA No. 00001669

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