March 2022

Accelerated Resolution Therapy (ART): A review of Treatments for Post-Traumatic Stress Disorder

Henry B. Burns Jr.
University of South Florida

Accelerated Resolution Therapy (ART): A review of Treatments for Post-Traumatic Stress Disorder

by

Henry B. Burns Jr.

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Education in Educational Program Development
with a concentration in Educational Innovation
Department of Language, Literacy, Ed.D., Exceptional Education, and Physical Education
College of Education
University of South Florida

Major Professor: Elizabeth Shaunessy-Dedrick, Ph.D.
Howard Johnston, Ph.D.
Rich Young, Ed.D
Donna Knudsen, Ed.D
Cheryl R. Ellerbrock, Ph.D.

Date of Approval:
Febuary 22, 2022

Keywords: prolonged exposure, eye movement, burnout, veteran, practioner

TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

In the past, patients diagnosed with Post-Traumatic Stress Disorder (PTSD) were treated with medications that masked their conditions or through the use of various mental health treatments like Cognitive Processing Therapy (CPT), Prolonged Exposure Therapy (PE) or Eye Movement Desensitization and Reprocessing (EMDR) with limited success. Each of these treatments, lasting weeks or months, are mentally exhausting for the patient, and, over time, contribute to burn-out for the practitioner as well. The purpose of the study was to compare mental health treatments from the practitioner's point of view regarding burn out. Accelerated Resolution Therapy (ART) is a new form of treatment, calling for a shorter treatment period and, with assistance of a therapist, provides patients' greater control of their recovery. The procedure replaces negative images from patients' experience to help the patient to recover. This study compared ART with other PTSD treatments by having practitioners answer a survey regarding burnout and treatment success. The finding of the study is that ART can be used as frontline mental health treatment for mental health with little to no burn out associated with the practitioner. The findings are important in that ART offers an alternative treatment that reduces practitioner burn out.

CHAPTER ONE:

INTRODUCTION

Thousands of veterans and civilians who have witnessed or experienced trauma can develop a post-traumatic stress disorder (PTSD). The frustrations that these individuals feel from this disorder can have life-changing effects, not just on those with the disorder but also on their family members and members of the community in which they live. Perhaps due to a greater number of returning veterans from overseas the public has become aware of post-traumatic stress disorders. Many experiences like my own remain underreported as veterans and victims alike work through feelings of guilt.

Post-traumatic stress disorder for combat veterans is a growing diagnosis in the United States and the world following conflicts and traumatic events of the past several decades. Thousands of veterans and people who have experienced traumatic events are now seeking help, and the landscape for treatment is evolving. According to the Department of Veteran Affairs, as many as 480,000 veterans who served in Iraqi and Afghanistan may suffer from PTSD. Each day we lose an average of 22 veterans to suicide to the everyday stress of living with this disorder (Ye Hee Lee, 2015). According to Skovholt and Trotter-Mathison (2011), the practitioners who treat these patients are falling victim as well, experiencing burn-out due to the demands of the job and the constantly reliving of traumatic experiences with veteran or affected persons.

My Story

The time was 1995 and I was serving in the United States Navy. My primary job was as a Rescue Swimmer and I had recently received my wings as a certified U.S. Navy Aircrewman.

This process required me to work a year in the rescue pipeline, with attendance in schools from Florida to California. Every couple of weeks my helicopter squadron rotated from Aircraft Carrier to Cruiser and back again, performing support missions and providing ship security for ships in the Persian Gulf. I had been on this particular cruise for approximately two months - we would go into Iraq to pick up dignitaries or drop off Special Forces in the middle of the desert and return to pick them up weeks later. I viewed my experience to this point as a glorified mailman delivering others who had an important job. That all changed on August 12, 1995, during a night mission about 65 miles off the coast of Basra, Iraq. I was on my third shift and flying on the starboard side of an Aircraft Carrier on a moonless night; the only lights visible were the subdued lights of the ship. I was aboard the helicopter staring out onto the horizon and was not paying attention to the monotonous rhythm of the flight operations to avoid boredom and falling asleep. Then I heard the crash alarm sounding in my flight helmet and saw multiple flashes of bright yellow light as pops of fire arose out of the water in front of the ship. An S-3 Viking, the Navy's version of a fuel tanker, had crashed into the water.

The helicopter I was aboard took a high delta turn and accelerated as fast as the engines could carry us to the front of the ship. The Viking aircraft experienced a cold cat shot off catapult one with not enough power to gain flight; the plane rolled belly up before hitting the water. I experienced it all in slow motion; the ship ran over the aircraft that was in the water and the plane disappeared on the side of the vessel. I immediately put on night vision goggles and my fins and opened the side door of the helicopter. The weather was rough with 10–15-foot seas. The pilot navigated the aircraft between swells trying to get directly over the wreckage of the still-visible tail. I saw a flash from the reflective helmet of one of the Viking's pilots, notified our pilot's position and asked permission to jump. With permission, and without pausing, I pushed

off and fell into the unknown. I had the feeling of my stomach in my throat until the sudden thud of impact and water rushing around me awakened my senses. I popped to the surface and immediately was on the crest of the wave that changed my momentum and forced me belly first down the wave.

The smell of jet fuel was overwhelming and started to burn my entire body, especially my eyes. I spotted the Viking pilot, who was not moving, I grabbed him and found he was bleeding from his head and mouth. I signaled the helicopter for pick up, and the aircraft moved over me. At this point, I felt the jet wash from the helicopter, which felt like stinging pebbles hitting me in the face. I attached the harness to the Viking pilot so he could be hoisted the 30 feet up and out of the water to the helicopter.

At this point, the fumes from the aircraft were in my lungs, and I started throwing up in the water. I tried to swim back to the position where I found the pilot and looked around the surface for the other crew members. I looked down into the water, saw the fuselage below the surface, and started to swim down to it. I got to the fuselage, but I could not find any crewmembers in the cabin. My lungs were on fire as I kicked off the airplane to get to the surface. By this time there was a second helicopter over me, and on my radio I could hear a call for an assessment. I notified the second helicopter that the crew was not on the plane, and I asked to be hoisted up.

I started to think about the families involved in the crash and their loved ones. Later, I found out that the pilot I rescued from the water was already dead and the rest of the crew members had died upon impact and their bodies were never recovered. The Navy awarded me a medal for rescuing the pilot, but from that moment on, my perspective about life changed. I still have nightmares about this crash and contemplate what I could have done differently. It was not

until later in life that I realized I suffer from PTSD from this event, and the nightmares that I have are related to the trauma I experienced during this experienced that night. I became depressed after the crash and felt regret or what has been termed survivor's remorse. I have never talked about this with my family; only my wife knows bits and pieces. This moment in my life has changed me and contributed to the man I am today. I know I did my best under the circumstances, and over the years I have come to terms with what happened and what my actions were that night to help those crewmembers. However my experience with the Veteran's Administration (VA) and the frustration that I experienced in attempting to find relief for my PTSD is not an isolated experience. I know veterans have experienced PTSD over the years and Khazaie and colleagues (2016) suggest that, "Sleep disturbance and insomnia symptoms are associated with increased PTSD symptom severity" (p.508).

In 2003, I went to the VA because of nightmares, insomnia, and anxiety. At first, I did not realize I had a problem. I just associated my anxiety with a dislike for crowded stores. I stayed up late and did not like the commotion of city life. During one of my classes in college we had an unsettling group discussion on veterans and PTSD and it was during that class I began to recognize a few symptoms. The discussion was a little unsettling. After talking to some of the veterans I served with, a few recommended that I talk to someone at the VA. This time period was the height of the Iraqi-Afghanistan War and the VA was stretched thin due to the high numbers of veterans returning from conflict. VA hospitals were extremely busy. I spoke to a doctor, but all I really wanted was to talk to someone about the symptoms that I was experiencing. The doctor seemed too busy and distracted to listen; after 45 minutes he prescribed a multitude of drugs that just served to dull my symptoms. He also recommended that I attend an outpatient facility for Cognitive Behavioral Therapy (CBT). I took the medication for less than

two weeks because it made me feel "off." As for the outpatient facility, it was located in a run-down area of the city and I did not feel safe. The therapy meetings were okay and allowed me to talk to other veterans that were similar to me, but almost all had substance abuse issues or were chemically dependent. After attending a couple of weeks of group sessions, I still struggled with doing the homework part of the treatment and talking about my feelings and how my everyday life had changed over the past couple of years. I tried talking to the VA doctor and explaining that the meetings and medication were not for me, but he wanted to prescribe more medication and wanted me to continue going to the group sessions. I told him thanks, but I did not want to become a statistic and I stopped going.

In 2007, I went back to the VA because I had hurt my back and was in between jobs and therefore without insurance; I already had a new job lined up but would not be eligible for insurance for another couple of months. I was seen by a different doctor and was frustrated there were no records of my visits to the VA hospital only three years before. The doctor prescribed some of the same drugs, but only gave me a limited supply. I guess that protected him and me, but my experience with the VA was ultimately just another negative experience.

In 2017, I started this dissertation and I was still experiencing the same symptoms of PTSD. Over time, I have learned to manage it and deal with it without it affecting my everyday life. On the other hand, my wife had commented frequently about my behavior in stores and my worsening nightmares. I thought about my kids and how I wanted them to view their father and I decided to go back to the VA to get help. They offered the same treatment as years ago, as I was also hearing from fellow service members with PTSD that there were other treatments available that were more veteran friendly. The frustrations I had experienced influenced by decision to change my dissertation focus to one related to the treatment of PTSD. I started calling my local

Congressman relating veteran's treatment by the VA and my options were limited. He shared the number of a local treatment center and told me they were using different treatment methods and were having success. I decided to call them first and then used the experience with them as a catalyst for my dissertation research. When speaking with practitioners, they stated that of all the treatment methods they had used over the years, that Accelerated Resolution Therapy had been was most successful for the patient and use of ART as a treatment did not contribute to practitioner burn-out.

I wanted to experience Accelerated Resolution Therapy for myself in the way that other treatments did to determine its effectiveness as a patient and also as a researcher. After a few sessions, it was as if someone had opened the door for me and the weight that I had been carrying was lifted. That is why I began this study and why I am interested in Accelerated Resolution therapy. I now have first-hand experience regarding its use as a treatment for those suffering from PTSD; potential benefits to limit burnout for practitioners was the impetus for this study.

Background of the Study

Recently, the World Health Organization (WHO) reported that mental health professionals who treat patients with PTSD are leaving the profession due to burn-out or mental exhaustion from employment. This diagnosis has been included in the International Classification of Diseases (ICD-11). Symptoms include feelings of exhaustion or energy depletion and mental distance from one's employer or cynicism related to their employment. According to the International Classification of Diseases, practitioner burnout is an occupational phenomenon (World Health Organization, 2019). This phenomenon is exacerbated in high stress situations to help treat patients who are suffering from trauma. In other words, the mental health

practitioners treating patients with PTSD are suffering with a loss of energy for their profession and mental distance from their employer. This study will attempt to identify any predictors of burnout among practitioners and to establish if treating patients with ART is beneficial –not just for the patient, but also the practitioner –in preventing burnout or trauma among practitioners.

Problem of Practice

Researchers have been trying to determine why practitioners are at such a high risk for burnout and what factors may lead to burnout (Thomsen et al., 1999). Garcia and colleagues (2014) focused on the effects of the 2006 Veteran Affairs national initiative to disseminate evidence-based psychotherapies (EBPs) for PTSD, including Prolonged Exposure (PE) and Cognitive Processing Therapy (CPT), with the goal of making EBPs for PTSD available at every VHA facility nationwide (Karlin et al., 2010). Dreison and his colleagues (2018) focused on the demands of the mental health practitioner's job for any indicators of job burnout. Acker (2012) focused on burn out among mental health care practitioners, the aftermath of organizational changes, and the increased demand for mental health care providers, paying particular attention to the way the American mental health care system is organized. The prevalence of PTSD sufferers is troublesome on its own; however, when it both contributes to and is exacerbated by job burnout amongst mental health treatment practitioners, and any all credible treatment options should be explored. My positive experience following Accelerated Resolution Therapy was the motivation behind studying the effects of its use on practitioners' mental health.

Purpose of Study

The purpose of the study is to focus on Accelerated Resolution Therapy (ART) as a promising treatment for Post-Traumatic Stress Disorder (PTSD) and other traumas in order to (1) determine if ART can reduce self-reported mental fatigue among mental health practitioners and

(2) identify what features or characteristics of ART play a role in the reduction in burnout among mental health practitioners.

Research Questions

The purpose of this study was fulfilled by the investigation of two key research questions:

1. Does the use of ART reduce self-reported mental fatigue and burnout among a limited sample of mental health practitioners treating PTSD patients?
2. What features or characteristics of ART reported by a limited number of mental health practitioners play a role in the reduction of mental fatigue and burnout among those who treat PTSD patients?

Significance of Study

At present, no research exists that compares ART to other mental health protocols with regard to practitioner burnout. At present, no research exists comparing ART to other mental health protocols related to mental health practitioner burnout. Findings from this study expand the discussions of PTSD beyond a singular focus on patient treatments to one inclusive of both patients and practitioners.

Research Design

The method utilized for this study was secondary data analysis of survey responses (see Chapter 3). The study participants were ART practitioners, including: psychologists, social workers, family and marriage counselors, and mental health practitioners.

Analysis

I analyzed the survey data by generating descriptive statistics (frequencies, percentages, means, and standard deviations). I used several code weaving concept maps to determine common

themes from the first part of the survey. I separated topics into themes to further identify consensus points and outliers regarding ART and the practitioner's successes in treating patients with PTSD.

Role of the Researcher

I am the sole researcher of the study. Additionally, I am a Veteran of the United States Military who has been diagnosed with PTSD. Following my experiences at the VA, I tried to help others veterans who were in my same situation by volunteering, only to find out that the VA just wanted me to answer phones. I was introduced to Accelerated Resolution Therapy (ART) by my local elected official, Daniel Webster, and I saw the benefits for patients and practitioners and the potential for this treatment for helping people who suffer from PTSD. I have personally experienced the harm of PTSD--not only to the sufferer, but also to their family and loved ones. My past experiences and perceptions with the VA were likely influences on my research, especially as motivations in trying to find an alternative method of treating PTSD.

Definition of Key Terms

ART- Accelerated Resolution Therapy, often referred to as ART, is a form of psychotherapy and has been modified from pre-existing forms of evidence-based therapies (Kip et al., 2015).

PTSD- Post Traumatic Stress Disorder, is a psychiatric disorder that can occur in people who have experienced or witnessed a traumatic event (Myers et al., 2019).

CPT- Cognitive Processing Therapy, is a specific type of cognitive behavioral therapy that helps in the reduction of PTSD symptoms and helps the patient learn coping mechanisms (Resick & Schnicke, 1992).

PE- Prolonged Exposure, is a form of behavioral and cognitive therapy that helps reduce PTSD symptoms and is divided into two parts an imaginal and vivo exposures (Cooper et al., 2017).

EMDR- Eye Movement Desensitization and Reprocessing, is a form of psychotherapy that is used to treat trauma. The therapist directs the patient to recall distressing images and uses a bilateral sensory input to treat the patient (Balbo et al., 2019).

VA- Veteran Affairs provides services to America's veterans. It encompasses health care, benefits programs and when a veteran passes away access to national cemeteries to military personnel and their dependents (Veterans Health Administration, 2014).

EBP- Evidence based treatment, treatment that is backed by scientific evidence and theory. These treatments are thoroughly documented and have proven results that are successful to the patient (Karlin et al., 2010).

CBT- Cognitive Behavioral Therapy, type of psychotherapy that aids in identifying the thoughts and feelings that influence behaviors (Barrera et al., 2015).

Burn-out- A state of emotional, physical and mental exhaustion and prolonged stress (Acker, 2012).

Assumptions and Limitations

I did not seek to generalize the results of this study beyond this small sample; the number of participants may not sufficiently identify the breadth of potential ART effects on mental health practitioners. Other potential limitations of the study are the hermeneutic aspects of the practitioners and how they perceive and interpret the purposes and nature of their practice. Their commitment to the use of ART may not stem from the same or similar motivations as those of other practitioners. Finally, the study was limited by my own perceptions as a researcher, a Navy veteran diagnosed with PTSD, and an advocate for the use of ART for patients with PTSD. A discussion of this bias is also discussed in Chapter Three.

Summary and Overview of Study

The purpose of the study was to (1) determine if ART can reduce self-reported mental fatigue and (2) identify what features or characteristics of ART play a role in the reduction in burnout among practitioners. In Chapter 1 my own struggle with PTSD is presented along with, the background of the study, a statement of the problem and purpose of the study; the significance of the study; the research design utilized definition of key terms; and, assumptions and limitations of the study. The conceptual and theoretical framework is provided in Chapter Two based on Adaptive Informational Processing (AIP). Also provided is a review of the literature on Post Traumatic Stress Disorder (PTSD), Accelerated Resolution Therapy (ART), Eye Movement Desensitization and Reprocessing Therapy (EMDR), Cognitive Behavioral Therapy (CBT) and Prolonged Exposure (PE). The methods used to conduct this study and the logical basis for their appropriateness for this investigation is presented in Chapter 3. The finding of the study are presented in Chapter 4. The discussions of how ART is unique in PTSD treatment and factors associated with burnout, limitations, and my plan for the future are presented in Chapter 5.

CHAPTER TWO:

LITERATURE REVIEW

PTSD affects people of all races and ages. Sufferers relive a traumatic event a day or even years after the event occurred. PTSD has been called many things over the years, such as shell shock, and has been mistakenly been considered a condition that only combat soldiers experience while deployed in conflict (Horwitz, 2018). Yet, it has been misdiagnosed by mental health professionals and even the military community (Matto et al., 2019). PTSD has not been properly diagnosed in the military because of the fear among military personnel that by sharing their desire for treatment they will no longer be considered battle-ready (Schultebraucks et al., 2020). People who have PTSD experience a trigger that initiates a response from the traumatic event the person experienced. That trigger can cause flashbacks to the original event and sufferers may experience feelings of guilt, anger, anxiety, and emotional disconnect from family and friends. This disorder can also trigger emotional outbursts, problems sleeping, and difficulty concentrating on daily tasks. PTSD has been recognized as a disorder that people from all walks of life can experience in their lifetime.

Currently, there are various treatment methods for PTSD. Each treatment utilizes have different methods of delivery and treatment duration. This literature review will consist of relevant research concerning Post Traumatic Stress Disorder, Accelerated Resolution Therapy, Eye Movement Desensitization and Processing Therapy, Cognitive Behavioral Therapy, and Prolonged Exposure Therapy. In this chapter, I briefly address several of these therapies, including Cognitive Behavioral Therapy (CBT), Eye Movement Desensitization and

Reprocessing Therapy (EMDR), Prolonged Exposure (PE), and finally Accelerated Resolution Therapy (ART). There are multiple therapies available to treat PTSD, including Cognitive Behavioral Therapy (CBT; see Table 1), which is widely used to treat PTSD. This therapy uses a structured approach to treating the patient that combines therapy sessions and homework to improve cognitive distortions and behaviors (Bourdon et al., 2019). ART teaches the patient to use coping strategies in hope of improving and overcoming stressful situations that the patient may be experiencing. Cognitive Behavioral Therapy is intended to address the depression and anxiety that is associated with trauma and aids explicitly in addressing the negative memories and personal meanings behind the original traumatic event.

Another type of treatment for PTSD is Eye Movement Desensitization and Reprocessing Therapy (EMDR; see Table 1). This therapy focuses on the patient's eye movements. The patient follows a therapist's finger in a side-to-side motion and simultaneously focuses on their thoughts, emotions, and physical responses to the memory of the original trauma (Rubin, 2003). EMDR treatment can lessen the shock of the memory for the patient. This is accomplished over a six-phase treatment regimen that focuses on the patient's mental health. The therapy reintroduces a positive belief through bilateral eye movement. The therapist reviews strategies to address the trauma identifiers from the patient's past, present, and anticipated future.

Another therapy used to treat PTSD is Prolonged Exposure (PE; see Table 1) a form of Cognitive Behavioral therapy. Prolonged Exposure therapy is an approach that allows the patient to gradually face the memory that created the original trauma. This technique calls for the patient to relive the original trauma to recognize the cues that can trigger PTSD events (Cooper et al., 2017). The therapy combines two basic formats and is conducted by the therapist over three months. The first format is in the therapist's office and involves the therapist and patient

going over techniques to manage anxiety and working on gradually facing the trauma. The second format is homework that the therapist gives the patient, which involves using the techniques that the therapist prescribes to overcome stressful scenarios.

Table 1

Comparison of the treatments discussed for PTSD

Therapy	Accelerated Resolution Therapy (ART)	Eye Movement Desensitization Reprocessing Therapy (EMDR)	Prolonged Exposure (PE)	Cognitive Behavioral Therapy (CBT)
How it Works	Eye movements Processing	Eye movements Processing and controlled breathing	Processing of Memories	The patient sets goals
How the Patient Mind Processes the therapy	Visualize the trauma event at least twice during the treatment	Focus on the trauma event, focus on the negative aspects either emotion and your belief of the trauma	Repeated Image exposure to the mind	The patient knows what triggers the event. The patients identify their core belief system and understand the consequences of their actions.
How does the trigger change?	Desensitizes the negative emotion and replaces it with a positive voluntary image	Desensitizes the negative response and introduces a positive attribute	Desensitizes the fear response	Changing the patient's attitude and behavior by concentrating on the emotions that are held by the patient.
Any Homework	No	Yes	Yes	Yes
Length of Treatment	1-5 sessions over 2 weeks lasting 60-75 minutes.	1-2 times per week for a total of 6-12 sessions lasting 60-90 minutes.	Once a week for 90 minutes lasting three months	The patient keeps practicing in vivo experiences
How does the Patient manage future challenges	The patient becomes self-aware and uses eye movement techniques.	Patients learn how their triggers work and gain life skills to help process future events	Once a week from 5 to 20 sessions lasting 30minutes to 60minutes	Review lived behaviors and keep a list of positive behaviors. Establish a positive support system

Recently, Accelerated Resolution Therapy (ART) has been introduced as a therapy to treat PTSD. This therapy incorporates how the brain stores and processes memories by using bilateral

eye movements. This therapy also utilizes memory visualization from the patient's past and then incorporates a positive memory that replaces the traumatic one. ART is a short-term approach to address a single traumatic event in one session without requiring any homework or revisiting the traumatic event (Kip et al., 2014). Accelerated Resolution Therapy is divided into two components. During the first one, the patient recalls the details of the traumatic event to share with the therapist including the emotions, sensations, or thoughts surrounding the traumatic event. During the second component, the traumatic memory is targeted for a short period of exposure while the therapist guides the patient through this exposure and supplements a positive image in the place of the traumatic event.

Conceptual Framework

For this research, I used the Adaptive Information Processing (AIP) theory to guide my thinking about the literature review. Adaptive Informational Processing theory (AIP) explains how a person's memories are encoded and stored in a person's neural network. AIP theory targets the three stages of memory: encoding, storage, and retrieval. AIP suggests that new memories are stored in neural networks in a malleable state (Landin-Romero et al., 2018). These memories, if incorrectly stored, will eventually present as PTSD to the person. For the treatment of PTSD, this theory suggests that negative memories can be corrected if the memory is reimaged as a positive one (Landin-Romero et al., 2018). This theory has similar applications in ART, as the principle of voluntary image replacement technique can aid in the reduction of PTSD symptoms. The Adaptive Information Processing Model (AIP) has been used as the basis of other mental health treatments such as Eye Movement Desensitization and Reprocessing (EMDR) therapy, which have similarities to ART in that there have been numerous studies conducted with AIP as a guide for the treatment of PTSD.

Post-Traumatic Stress Disorder (PTSD)

Post-Traumatic Stress Disorder (PTSD) has affected countless lives; seeking treatment is the first step in the road to recovery. Every military conflict society has engaged in has acknowledged this disorder through varied names. Just in the last twenty years the name, Post-Traumatic Stress Disorder or PTSD has been aligned with people who have witnessed or experienced a traumatic event and suffered negative effects of traumatic memories (Myers et al., 2019). Over 1.9 million veterans have served in the Afghanistan and Iraq Wars (Operation Enduring Freedom (OEF)/Operation Iraqi Freedom (OIF)/Operation New Dawn (OND); OEF/OIF/OND; and 1.2 million have sought treatment at the Veterans Health Administration (VHA) (Veterans Affairs, 2014). This literature review addresses different aspects of the treatment of PTSD and the different treatment options available.

It is important to identify how mental health professionals diagnose PTSD (Dickstein et al., 2015). The U.S. military utilizes a PTSD Checklist (PCL; Weathers et al., 1993), a 17-item self-report questionnaire with sound psychometric properties (Wilkins et al., 2011). When a patient who screens for PTSD is an active-duty member of the armed services, their self-reported score is relatively low when compared to veterans who screen for PTSD. This is because most research investigating the prevalence of PTSD in the military has relied upon a diagnostic cutoff score derived from studies of civilians or veterans with chronic PTSD (Hoge et al., 2004; Kim et al., 2010; Schneiderman et al., 2008; Thomas et al., 2010).

This gap in research is why Dickstein and his colleagues (2015) conducted their research examining factors contributing to the variability of scores of screened patients. The study had two strengths: it was conducted with a relatively large sample size of active-duty service

members and it was only the second known study to identify the cutoff scores for PTSD, specifically targeting Vietnam veterans (Forbes et al., 2001; Weathers et al., 1993). The authors identified the limitations of the study, including a significant one -- even though the researchers used a large sample and a randomly stratified subgroup of service members, it did not include any female service members. Despite these limitations, the author's conclusions about the study are convincing and are based on considerable data about scores for the male active-duty members and the veterans who were surveyed. This study identified unwillingness on the part of active-duty service members to report mental health problems due to concerns of being stigmatized or being denied opportunities for advancement (Gorman et al., 2011; Hoge et al., 2004; Kim et al., 2010). This study also identified and clarified the gap between the veteran and active-duty service members who screen for PTSD and compared both veteran and active-duty scores when screened for PTSD.

Hundt et al. (2018) sought to identify why veterans initially decline therapy and consequently why they do not complete treatment once they have begun. Citing several studies, the authors identified the scope of the problem and citing data from 2007 to 2012 indicating that few veterans with PTSD are receiving PE or CPT and of those that were only 6%–13% were completing their programs (Lu et al., 2016; Mott et al., 2014; Shiner et al., 2013). These authors also stated that "PTSD providers spent fewer hours per week delivering these treatments than supportive/psychoeducational care" (Finley et al., 2015, pg. 78). The completion rates are equal to or lower in the community at large because practitioners have not been provided enough training in treating military service-related PTSD (Tanielian et al., 2014). Barriers to completion include practical, knowledge, emotional, therapy-related, and VA-system-related (Hundt et al., 2018). The strength of the study is that it identifies if a veteran faced one or more obstacles to

completing the therapy program, the probability of completion was drastically reduced. Also, the study indicated the need for other therapies to treat veterans with PTSD. A limitation of the study was that it only addressed veterans from a local VA medical clinic, and the patients were exclusively male. The authors also addressed possible limitations due to patients' self-reporting. The authors' conclusions illuminate what many practitioners already know -- that barriers, either practical or personal, can hinder the treatment of PTSD. The findings of the study indicate that while there are common barriers, future research should be conducted to identify individual barriers to treatment and factors that lead to the successful completion of PTSD therapy.

The majority of existing studies on PTSD focus on men, but women also serve in the military in combat zones. Gobin and colleagues (2018) compared women who were in the military with civilian patients who suffered from PTSD. Gobin and his colleagues (2018) suggest that "veteran and civilian women did not differ on any demographic characteristic, baseline diagnoses or symptom severity, negative trauma-related cognitions, or whether they engaged in concurrent treatment" (Gobin et al., 2018, p.173). Previous research, however, suggested that veterans benefit from a treatment less than civilians due to a number of mental health issues, including PTSD (Bradley et al., 2005; Morland et al., 2015), degrees of depression (Hundt et al., 2014), and anxiety (Barrera et al., 2015). The findings from Gobin et al.'s study indicate that women veterans are less likely to get help or seek treatment, which contradicts previous findings suggesting women veterans will seek out help. The strength of Gobin et al.'s study is that it addresses predictors in the treatment variable and aims to address the role that trauma plays in identifying PTSD. A limitation of the study is that it only used female participants, which may limit the generalization of the findings. The authors' perspectives are forward-thinking in that theirs is the first study to look at the comparison of women who have PTSD, whether civilian or

active military. The study is different because it contradicts previous notions that active-duty military service members do not seek help for PTSD. Gobin et al. also acknowledge a need for further research on any treatment predictors and conclude that if any of these predictors overlap, then a diagnosis can aid in the treatment of PTSD.

The public has drastically misunderstood the treatment of mental health in active-duty military members. The public underestimates the time it takes for the active-duty military to be evaluated and treated when mental health treatments are administered by the VA. Cigrang et al. (2015) studied the length of time required for treatment in either (PE) Prolonged Exposure or (CPT) Cognitive Processing Therapy for active service members receiving treatment from the VA. The patient's time commitment is extremely long, averaging 8 to 15 weeks of multi-step sessions, each of which consists of 60 to 90 minutes of trauma-focused therapies (Cigrang et al., 2015). In a primary care setting, the drop-out rate is relatively high: between 20 and 40% (Eftekhari et al., 2013; Foa et al., 2005). The dropout rates for treatment of PTSD are higher, but about the same as in a primary setting. The strength of Cigrang and his colleagues' study is the finding that treatments with long regimens have a higher dropout rate than those with shorter treatment regimens due to the availability and acceptance of mental health care by the patient. Cigrang and his colleagues pose the question: *What would the success rate of a mental health treatment be if it was short and didn't have the patients relive the trauma they encountered*? The authors' conclusions relate to the study of ART, a short, non-intrusive treatment method from which both the patient and the medical professional can disassociate. Cigrang and his colleagues' study is among the few that consider the timeframe of the treatment and suggests that a shorter streamlined treatment can benefit patients who have PTSD.

Armstrong, Bilsky, Zhao, and Olatunji (2013) attempted to identify if medical professionals know how eye movements and specific physical cues indicate that the treatment they are giving is effective. Their study was the first to compare gaze biases to emotional expressions in patients with PTSD. This research used the Stroop Test (Williams et al., 1996), a neuropsychological test used to assess the ability to inhibit cognitive interference. Armstrong and colleagues also explored and recorded responses that are different from eye movement tests that have been performed in other studies. The strength of the study is the measurement of disgusted, fearful, happy, and neutral expressions compared with eye movements during the treatment process. The limitation of this study was the patient's attentional bias toward a threat indicator after the patient developed PTSD and while outside a warzone (Armstrong et al., 2013). The authors' conclusions are convincing in that one cannot simulate completely the stressors in the body after PTSD has occurred. Also, facial characteristics associated with emotions are a useful variable when combined with the other identifiers for the parameter of treatment. Armstrong et al.'s work identified characteristics of potential markers, either through emotional or physical symptoms of PTSD, and possible cognitive markers for PTSD in veterans that could be potentially targeted through procedures that improve attention control (Verwoerd et al., 2012).

Accelerated Resolution Therapy (ART)

In the last 20 years, there have been drastic improvements in the treatment and advancement of mental health. ART shows promising results for the treatment of PTSD. ART has been the subject of research since 2012 and has been recognized by the Substance Abuse and Mental Health Services Administration (SAMHSA) and the National Registry of Evidence-Based Programs and Practices (NREPP) for the treatment of depression and depressive

symptoms, trauma, stress-related disorders, and personnel resilience/self-concept as an effective treatment for mental health (Is-art, 2018).

ART is delivered in two to five sessions over two weeks and requires no homework for the patient (See Table 1). The patient, with coaching from a mental health practitioner, is encouraged into a relaxed state of mind and then exposed to a recurrence of the specific traumatic memory for a short interval of 30 to 45 seconds. This exposure to the memory is followed by the practitioner helping to identify and reduce any uncomfortable emotional or somatic symptoms (Kip et al., 2013). This occurs by directing the patient's awareness of the symptoms while engaging in clinician-directed eye movements. The therapist then leads the patient through sets of frequency-regulated eye movements while recalling the memory, resulting in the patient becoming self-aware of any physical and emotional sensations associated with reliving the trauma. The therapist then directs the participant toward two complete phases of exposure to the targeted memory (Kip et al., 2013).

Accelerated Resolution Therapy (ART) research has been around for 20 years and the importance of this new therapy and its uses as a treatment for PTSD need to be addressed. A study that focused most clearly on combat-related symptoms of PTSD was called a *Randomized Controlled Trial of Accelerated Resolution Therapy (ART) for Symptoms of Combat-Related Post-Traumatic Stress Disorder (PTSD)* by Kip and colleagues (2013). This study focused on veterans of Florida and local organizations. The researchers wanted to see if ART could be used to treat symptoms of PTSD. Although their findings suggested significant reductions in PTSD symptoms, the authors stated that other protocols needed to be compared with other first-line therapies for the findings to be verified (Kip et al., 2013). Strengths of the study include the wide variety of therapists involved and the treatment protocol. Further, neither the founder of ART nor

the lead trainer was involved with the study, minimizing the potential to skew results. A limitation was that ART was not compared to front-line treatments, such as Prolonged Exposure (PE). The researchers suggest this study as a good starting point for investigations of Accelerated Resolution Therapy as a viable treatment option for PTSD.

A subsequent study about ART focused on the before and after-effects of the treatment (Kip et al., 2014). The study was unique in that it focused on a case study of a veteran who suffered from symptoms of military-related PTSD. The participant screened positive for PTSD before treatment with a high score of 50 on the PTSD military version checklist, then received two ART sessions. After a three-month follow-up, the veteran's score was reduced to 21 on the PTSD military version checklist. The strength of the report is that it followed one veteran's experience and documented substantial results, although no follow-up on the veteran was provided. The findings from this study underscore the need for additional investigation on a larger scale.

A third evaluation study of ART focused on whether the treatment can help veteran homeless populations living in shelters (Kip et al., 2016). The authors focused on the effectiveness of the treatment with veterans who were living in a homeless shelter compared with those who resided in the community. The investigators also focused on the characteristics of veterans who are homeless and non-homeless to determine if the success rate of the treatment would be different for these groups; specifically, if any of the characteristics identified were factors for success or failure for ART (Kushel et al., 2001; Washington et al., 2010). The authors acknowledged that veterans who are chronically homeless tend to be older than veterans living in the community (Tessler et al., 2002; Tsai et al., 2012). Although the study used a relatively small sample size and a limited number of locations, it did reveal that veterans who are homeless

tended not to complete the program when compared to community veterans because of other complicating variables associated with homelessness. Because of the relatively brief time required for ART, the findings suggest promise for working with veterans who are homeless if the complications of homelessness can be mitigated.

Additional studies by Kip, Hernandez, Shuman, Witt, Diamond, Davis and Rosenzweig (2015) compared the primary trauma exposures between civilian and military adults experiencing PTSD. In the civilian study, the primary trauma that civilians disclosed in treatment were violent or abusive crime (51%), loss of a loved one (29%), divorce (11%), and chronic or acute illness (10%). Among female civilians, 26.4% reported sexual trauma as their primary trauma. In the military study, the central trauma for which treatment was sought included witnessing the death (38%), improvised explosive device blast or combat explosion (34%), sexual trauma (11%), homicide of a civilian (4%), or experiencing three or more significant traumas (13%) (Kip et al., 2015). Both studies used the same protocol and similar assessments. There were several limitations, including the small sample size of female participants, the lack of comparison of ART with other mental health treatments, and the lack of comparison of follow-up time between the military and civilian subjects. This study examined the differences between military and civilians being treated by ART, with the focus on sexual traumas. The results of the study showed reductions in both the civilian and military patients treated with ART. The researchers concluded there is potential for ART as a viable option in treating both civilian and military personnel who have PTSD and sexual trauma.

A study by Hernandez, Waits, Calvio, and Byrne (2016) followed the recommendation that ART is compared with other treatment methods; Hernandez and colleagues compared conventional treatments of PTSD with ART. According to Steenkamp et al. (2015), "Recent

emphasis on outcomes for PTSD and current evidence-based approaches such as Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE) therapy suggest that despite a notable reduction in symptoms, as many as 60–72% of patients retain their PTSD diagnosis after treatment with CPT or PE" (p. 493). Preliminary findings comparing ART with other PTSD therapies suggest that ART applies evidence-based therapies through the use of a procedural, directive, and short-term approach that is designed to address a single event without any homework or repeated visits of the targeted experience or memory (Kip et al., 2014a). This procedural aspect of ART makes it unique in the mental health field and, when it is compared to Eye Movement Desensitization and Reprocessing Therapy (EMDR) -- another eye movement therapy for PTSD--there are notable differences. EMDR was initially viewed with considerable skepticism but has gained popularity since its endorsement by the American Psychiatric Association in 2004 (Ursano et al., 2004). EMDR has accumulated a large body of evidence and is among the top three evidence-based approaches adopted by the Department of Defense (DoD) for the treatment of combat-related PTSD (DoD/VA, 2010). Although there are similarities between them, the differences exist within the procedural aspect of treatment. According to Hernandez and associates (2016), with EMDR protocol, the practitioner asks general open-ended questions about the original trauma without identifying it, then offers strategies to manage the trauma. However, the practitioner of ART provides the client with specific instructions for what to do after the client answers the questions about trauma. In comparing the second treatment of Cognitive Processing Therapy (CPT) to ART, CPT contains elements of cognitive therapy and informational processing theory (Resick & Schnicke, 1992). The difference between these therapies is that CPT helps clients restructure the schemes or memories to produce balanced cognitions in a process known as accommodation (Kip et al., 2013; 2014; Resick & Schnicke,

1992). The strength of Kip et al's. (2014) investigation is that it compared other treatments to ART and pointed out the similarities and differences between them. The limitation of the report is that it only provided a few case studies and no long-term studies about which treatment works best for patients with PTSD. Perhaps most importantly, this study introduced the theoretical perspective of each treatment and compared it with ART. The author's conclusion is ART is a good starting point for any long-range research that would compare each treatment with another in a clinical setting.

Eye Movement Desensitization and Reprocessing Therapy (EMDR)

The therapy most similar to ART is Eye Movement Desensitization and Reprocessing Therapy (EMDR) because both use the patient's eye movement to treat the patient's condition. Balbo, Cavallo, and Fernandez (2019*)* explain the background of EMDR and how Adaptive Informational Processing (AIP) is the theoretical model that gives the practitioner a therapeutic plan to work on the memories and key experiences of the patient's life. The delivery method of EMDR and how a person's memory spontaneously processes memories within the neural network made EMDR a common practice in psychotherapy. EMDR targets the memory that causes the trauma and reactivates the innate processing system within the neural network of the brain. This reactivation unblocks the information-processing mechanism and activates the innate self-healing mechanism (Balbo, 2016). Balbo et al. establish that EMDR healing will only be successful when the patient acquires a different perspective about their motivations and wants to change their behaviors. Balbo et al.'s study follow an individual receiving treatment after experiencing a traumatic event at work. The patient completes all the phases of the treatment cycle; after a year of follow-up, there was a reduction in anxiety and the patient returned to her work. Especially important for practitioners, the strength of the study was the thorough

description of each session and documentation of how the patient felt throughout the treatment process. The acknowledged limitation of the study was that it only followed one patient and did not expand on how the EMDR method delivery might have other effects besides anxiety. This study showed that a practitioner could use EMDR to treat PTSD, and future studies are warranted to understand better which patients could benefit from using EMDR and which may fail to respond.

A study of Eye Movement Desensitization and Reprocessing Therapy (EMDR) by Rousseau, El Khoury-Malhame, Reynaud, Zendjidjian, Samuelian, and Khalfa (2019) aimed to understand how the brain responds to treatment of EMDR among patients who have PTSD by trying to understand the pathophysiology of PTSD using EMDR as a treatment. The hypothesis was that PTSD happens in the fear-processing pathway and parts of the brain; the amygdala and prefrontal cortex are altered when PTSD is present (Ahs, et al., 2015). This study used functional magnetic resonance imaging (fMRI) to measure blood flow during the treatment of EMDR with patients who had PTSD. The researchers tested 16 patients and used a control group to analyze changes that the patients experienced following the completion of the eight-step EMDR treatment. The strength of the study was that they were the first to report any association between brain activity and remission of PTSD symptoms after patients were treated with EMDR. A limitation of the study was that some of the patients were on antidepressant and antianxiety medicines that could have led to altered cognitive and neural processing. This study showed that further experiments involving EMDR with fMRI should be conducted to validate any connection of brain activity with the reduction of PTSD symptoms.

McLay, Webb-Murphy, Fesperman, Delaney, Gerard, Roesch, and Johnston (2016) focused on active duty service members and investigated the efficacy of EMDR using a database from

the Naval Center for Combat and Operational Stress Control that included self-reported retrospective results. The authors found a significant reduction in PTSD symptoms following EMDR, with 63% of those surveyed reporting a reduction in symptoms. In this study, EMDR advantages exceeded other evidence-based therapies that were examined. The study utilized a relatively large sample size and a clearly-defined combat-exposed population. The authors concluded that the database could not decipher precisely what was being compared; though two therapies were used-- Prolonged Exposure Therapy (PE) and Cognitive Processing Therapy (CPT)—all cases were labeled with one of the two therapies: Cognitive Behavioral Therapy (CBT).

Cognitive Behavioral Therapy (CBT)

For the past 30 years, Cognitive Behavioral Therapy (CBT) has been the standard of treatment for patients who experience PTSD. CBT focuses on helping the patient understand the process of their experience and how they can influence their thoughts, emotions, and behaviors. The main focus of CBT is to allow patients to reassess their views regarding themselves and the disorder. CBT is conducted in face-to-face therapy sessions that can be conducted over the course of five months.

One Australian study evaluated the benefits and risks of online treatments by comparing the efficacy and safety of a similar internet-delivered protocol (iCBT) for PTSD without the exposure component. The study aimed to create a more relaxed environment for the patient that is generally achieved in an outpatient environment (Spence, et al., 2014). The participants were recruited from Macquarie University Media Office in Australia, and the online treatment lasted eight months, with eight weeks per phase of treatment. The study used both exposure and non-exposure treatment protocols to validate any results that showed a reduction in PTSD symptoms.

Results for the exposure and non-exposure treatments showed no differences in rates of adverse events, attrition, or treatments between the groups. The study also showed that using an online format to treat patients in a non-exposure environment could have implications in the future resulting in increased access to such interventions.

Insomnia is the most frequent complaint among veterans and active-duty military personnel who experience PTSD. The work tempo and long hours that military personnel is subject to during their military careers have been shown to be an early indicator of PTSD (McLay et al., 2010). Lee, Breitstein and Hoyt, and their colleagues (2019) examined the effectiveness of Cognitive Behavioral Therapy Internet (CBT-I) among active-duty military personnel in a real-world setting. Theirs was a retroactive study that used electronic medical records (EMR) from a military hospital-- specifically, a sleep clinic. The findings were largely based on patients' sleep diaries and other sleep data, and suggest that if a patient had fewer than four treatment sessions, there was no improvement in sleep patterns. However, if the patient had more than four treatment sessions, the patient experienced long-term improvements in sleep patterns. While the researchers affirmed that CBT-I could be used to treat insomnia, the lack of a control group rendered the findings less than conclusive. The study did suggest a need for more research in a real-world setting and the need for future studies to offer CBT-I in a flexible format due to the deployment schedule of military personnel.

After years of conflict in Iraq and Afghanistan, many veterans who come home with PTSD struggle with high rates of alcohol abuse. Possemato, et al. (2019) conducted a study focused on delivering peer support to individuals with co-occurring PTSD and hazardous alcohol use. This Cognitive Behavioral Therapy study sought to evaluate the feasibility of adding a peer support group called Thinking Forward to Cognitive Behavioral Therapy (CBT). The online

module program offered a 12-week schedule of self-guided, structured, web-based interventions. Possemato, et al. found the peer-supported Thinking Forward program can be successfully delivered and combined with CBT. Peers who provided support to the patients saw the benefits of the structured approach of the Thinking Forward Guide, although the authors reported that the sample size was small and the relationship between the peer and peer-supported groups did not offer generalizations that could be used for other samples. Findings from this study suggest that peer support can be combined with other interventions for primary care in veterans with co-occurring PTSD and severe alcohol consumption.

Prolonged Exposure

Another PTSD treatment is Prolonged Exposure (PE). This therapy calls for the patient's retelling of the traumatic memory to a practitioner who gradually introduces situations and reminders of the trauma so the patient can develop coping strategies. Research has repeatedly shown that individuals with elevated symptoms of posttraumatic stress disorder (PTSD) or a PTSD diagnosis are at increased risk for suicide (Holliday et al., 2020; Panagioti et al., 2009, 2012). The relationship between suicide and PTSD has been implicated in military veterans taking their own lives at an alarming rate. People who have PTSD are two to six times more likely to consider suicide or have suicide ideation (SI) or suicide attempts (SA) than non-PTSD patients (Kessler, et al., 1999; Sareen, et al., 2005) and are almost 9.8 times more likely to die from suicide (Gradus et al., 2010). In general, most mental health providers do not recommend treating patients with prolonged exposure who are at risk of suicide, and all treatment methods must be examined to address potential suicide risks. One study addressing these concerns for this therapy conducted by Brown, McLean, Zang, Zandberg, Mintz, Yarvis, and Foa, (2019) at Fort Hood, Texas compared groups who were treated with PE for different lengths of treatment and

used different methods of delivery. The results of the study concluded that both trauma and non-trauma-focused treatments are associated with reducing suicide intentions. The limitation of the study was that participants had a low score of suicidal behavior or suicidal ideation before the study and the results cannot be generalized with patients who have severe suicide ideation. This study showed that there needs to be more research conducted in Prolonged Exposure concerning PTSD and patients who are at risk of suicide.

A second study of Prolonged Exposure (PE) addresses veterans and military personnel who have PTSD and are suffering from insomnia and nightmares. When veterans with PTSD return home, getting them treatment helps them return to their family, work, school, or community. The symptom that is often not treated is sleep disturbance, with up to 90% of veterans who have PTSD reporting sleep disturbance, including some form of insomnia or constant nightmares as mentioned previously (Maher, et al., 2006). Walters et al. (2020) demonstrate that sleep disturbance can last for years and can intensify PTSD as well as hinder front-line treatments for the patient's recovery. The purpose of Walters et al.'s study was to identify any effects of PE on a sleep intervention that could both improve sleep symptoms and daytime PTSD symptoms. The study was conducted with veterans of Iraq and Afghanistan conflicts with PTSD who also experienced insomnia and nightmares. Walters et al. found PE improved daytime PTSD symptoms but not nighttime symptoms. Although the study employed randomization and a control group to validate the results of the study, the patient dropout rate of 43% calls into question whether a certain type of patient self-selected out of the treatment. Findings suggest that more research is needed about the prevention and treatment of insomnia before, during, and after the treatment of PTSD.

A challenge with Prolonged Exposure is the length of required time treatment needed before benefits to the patient are often seen. With PE treatment, 90-minutes across 8 to 15 sessions is typical for patients to see any results. Two previous studies compared treatment protocol times (Nacasch et al., 2015; Van Minnen & Foe, 2006), but each study was small and did not include active-duty military personnel. Another study, currently underway, focuses on comparing the results of 60-minute treatment sessions that produced the same results as 90-minute treatment sessions. Foa, Zandberg, McLean, Rosenfield, Fitzgerald, Tuerk, and Peterson (2019) focused on active-duty military personnel who received repeated exposures and prolonged imaginal exposures to memories. This treatment also included education about PTSD and breathing exercises to cope with stressful situations. The strength of this study is participation by active-duty military personnel, although it is limited to capturing only one dimension of emotional distress and the possible biases of inherent self-reporting by the patients. It is expected that, when completed, the study results could benefit thousands of patients who suffer from PTSD while increasing the readiness of our Armed Forces while decreasing the public cost of lost productivity and disability costs.

Discussion

There is scarce research focused on mental health practitioners as patients when administering PTSD treatments and none where they use ART. Consequently, PTSD practitioners have had to experience what their patients experience with other treatments. Practitioners have increased caseloads, and more veterans and the public are self-reporting that they are experiencing PTSD. The increase in both of these demands has increased stressors on ART practitioners. Thus, there is an increase in research about burnout in medical fields and the mental health specialty.

Research GAPS

There are significant gaps in the PTSD survey of literature research presented here; treatment barriers and the differences between the diagnoses of men and women are two of the most important. There is also a gap in the research on how emotions and physical expressions play a vital role in the treatment of PTSD. In addition, instrumentation may be a problem, with some studies suggesting the PTSD military checklist can be manipulated so that PTSD may be present even in low scores (Guina et al., 2016). There are gaps in the research about patients who decline help and the common barriers that could be identified for people who suffer from this disorder. With the comparisons of women reporting PTSD, the gap in the research suggests that there is fear of stigmatism and underreporting of PTSD of men to doctors or supervisors for fear of being labeled and declared "unfit" for duty (Conrad & Saul, 2014). Even in the studies about emotions and physical characteristics, the slightest clue can give the mental health professional the information they need to help their patient. Gaps in the research suggest a need for more professional development for practitioners concerning the identification of PTSD in their patients.

Among the different PTSD treatments located in this survey of the literature, several distinct factors could make ART a viable treatment for PTSD. All of the therapies reviewed had gaps in their research; ART is somewhat more comprehensive than the other therapies and may help to close some of the identified gaps through future research. The major gaps that exist for ART research include treatment time, treatment protocol, and follow-up for long-term reduction in PTSD--all of which can be addressed in future studies.

With all the PTSD treatments discussed herein, there is a gap in the research of any long-term follow-up with the individuals after treatment. The standard treatment protocol for PTSD

(See Table 1) is three to six months follow-up in most studies reported here. Most of the studies concluded long-term follow-up after a year of treatment completion is needed to determine sustained benefits. Currently, there is a more extensive long-term study at the University of Cincinnati that compares ART to other approved psychotherapies from the VA (Chard, 2022) (forthcoming). If Chard finds that ART is effective for PTSD treatment, then this will likely lead to additional opportunities for research about ART, and an increase in the use of ART for the treatment of PTSD.

The second gap in the ART research is the treatment protocol. Most of the first-line treatments for PTSD, like CBT and EMDR, have an established treatment protocol that follows a model for others to follow. What the gap in the research does not allow for is that every patient is different and many of these different treatment methods vary greatly in addressing insomnia, anxiety, and hazardous alcohol consumption. Some of the treatment methods do not encourage practitioners to treat a patient who has suicidal tendencies. There are a few treatments, like CBT and PE that suggest an online format could benefit the patient and streamline the way the medical community treats PTSD. What makes ART different can be its potential for peer counseling and it's lean towards the holistic treatment of a patient.

The other gap in all of the established PTSD treatments is the time within the treatment and length of treatment. Most of the treatments, like CBT, EMDR, and PE, require months in therapy before positive results are realized. The dropout rates can be high and the success rates minimal. In addition, some sessions involve more than two hours of revisiting intense traumatic memories. What makes ART unique is its short treatment protocol for the patient. All of these gaps in the extant research of PTSD treatments offer an opportunity for the introduction of

different therapies other than the established front-line treatments. This allows for the opportunity to examine ART as a viable treatment option for patients who suffer from PTSD.

The final gap in the research is the connection between the practitioner and ART. The existing research indicates that practitioners represent the population of workers with the highest risk of burnout in mental health (Thomsen et al., 1999). This study looked at the organizational and individual factors to work-related exhaustion and job satisfaction. It compared the organization to the individual characteristics with predicting exhaustion. The study did identify health care workers specifically those that work in the mental health field seem to have a higher risk for mental illness, burnout, and suicide. The strength of the study identified several factors that could lead to burnout. The factors identified were organization, personal background, and job satisfaction. The results indicated that the practitioners experienced a significant threat of violence to themselves in the last year from their patients. They also indicated self-esteem and active coping as major barriers to job satisfaction and increased burnout. The study also identified that there was no difference between male or female practitioners or professional job titles in regards to the practitioner having a higher percentage of job satisfaction or burnout. This study is different from the other studies about burnout in that the results identified that the organization does not increase the possibility of burn out but it's the individual professional fulfillment, coping mechanisms, and work-related exhaustion

There has been research on CPT and PE about burnout in the practitioner (Garcia et al., 2015). Garcia et al. indicate that practitioners reported high levels of exhaustion and cynicism when completing the Evidence-Based Psychotherapies (EBP) like CPT and PE. The study focused on the relationship between CPT and PE regarding burnout among practitioners. The factors that the researchers identified were the proportion of the work-week spent conducting

therapy sessions and the provider's background characteristics. The strength of the study identified that PE therapy requires the practitioner to relieve the patient's traumas over and over to help aid the patient's recovery and increase the level of burnout in the practitioner. This study is also different than other burnout studies because the patients and practitioner indicated the treatment worked and the practitioner contradicted previous studies and discussed the importance of organizational factors such as a lack of control over work, VHA policies, and an organizational hierarchy as a predictor of burnout.

The VA conducted a study comparing burnout with its practitioners involving the treatment of PTSD (Garcia et al., 2014). Practitioners expressed frustration over patient care loads and little control of the treatment. The mandates that the VHA place onto its practitioners have led to increased clinical responsibilities and thus decreased non-clinical duties. The study indicated that performance measures may increase workload pressure on VHA staff. The researchers also indicated that the increase of access to care may lead to increased burnout, staff turnover, and decreased job performance. The strength of the study was the large number of practitioners it surveyed but the results weren't detailed and didn't compare the community-based mental health staff to the VHA mental health staff. The results of the study couldn't identify which one was more prone to burnout. This study did point out some negative effects of burnout such as low staff retention, staff absenteeism, and practitioners wanting to leave the mental health profession altogether.

In another study, psychologists admitted they experience burnout when treating patients with PTSD (Skorupa & Agresti, 1993). Skorupa and Agresti indicated that practitioners view burnout as a manifestation or impairment to their practice, but practitioners did not treat their own PTSD. The study identified that there are variables that can indicate potential burnout which

are treatment orientation, the difference between the real and actual caseload, years in practice, and therapists intent to leave the profession. The strength of the study identified a common factor associated with all the practitioners. The results were a sense of emotional overextension of one's work and impersonal responses toward patients with ethical beliefs about conducting a therapy session while having their impairment. The practitioners believe in not harm while conducting a session. All the practitioners took a professional development course on professional ethics during the certification process. This correlated with the results in the study in which the perception of the practitioner's view on burnout directly affected how they treat patients regarding continuing to practice psychotherapy. This study was unique in that it identified the practitioner's belief of burnout and doing no harm to the patient as reasons for burnout and leaving the mental health profession.

Consequently, there has not been any research about the ART practitioner related to treating PTSD. All the other studies either identified the view of the practitioner compared with the organization or severity of the patient's trauma as factors of burnout. This would be the initial study to explore the effects of ART therapy on the ART practitioner.

CHAPTER THREE:

METHODS

The purpose of the study was to (1) determine if ART can reduce self-reported mental fatigue and (2) identify what features or characteristics of ART play a role in the reduction in burnout among mental health providers. There is a gap in the research into ART and how it affects the practitioner. The participants in this study are healthcare providers, specifically psychologists, social workers, marriage counselors.

Research Design

In this study, I employed secondary data analysis. The study is a secondary analysis of a 32-item survey that measured responses received from practitioners of ART. The purpose of this survey was to identify characteristics that make ART a viable option in the treatment of PTSD. The study population was ART practitioners (psychologists, social workers, family and marriage counselors, and mental health professionals).

Research Questions

1. Does the use of ART reduce self-reported mental fatigue and burn-out among a limited sample of mental health professionals treating PTSD patients?
2. What features or characteristics of ART are reported by a limited number of mental health professionals to play a role in the reduction of mental fatigue and burnout among those who treat PTSD patients?

Survey Development and Data Collection Process

A survey (see Appendix A) conducted via email (July, 2019) solicited the responses of over 150 ART practitioners located in the United States, Canada, and Europe. The questions and groupings for the study originated when I attended the National Conference for ART practitioners in Springfield, Massachusetts, and asked different practitioners in break-out groups what questions I needed to ask to improve ART. In this study, 76/150 ART practitioners responded to the survey (response rate 51%), which is housed on USF Qualtrics software provided free for use by USF students. Permission for the study was obtained from participants to analyze the data at the time of data collection. All data remain anonymous and no participant's names are identifiable in the study. The data are stored in an encrypted file at USF College of Education and shared only with my major professor.

Data Analysis

Descriptive Statistics were used to analyze ART practitioners' characteristics and any outliers that predict burn-out in the profession. The results were tabulated on an Excel spreadsheet from USF Qualtrics and put into graphs that measure the four types of descriptive statistics (Frequency, Central Tendency, Dispersion of Variation, and Percentile). The measure of frequency was used to describe any commonality of answered questions of practitioner burnout to the size of the population surveyed. The measure of central tendency was used to identify any center point or mean, median, or mode of the answered questions. The measure of the dispersion of variation was used to identify any variability or spread of outliers in burnout. The measure of percentile was used to identify any data value within a given data set.

Validation and Reliability

There are no identification markers associated with the ART practitioners. Participation in the study was confidential. The results only identify any outliers or common characteristics among ART practitioners that can further improve ART treatment. There is no risk to participants associated with this study. A consent marker was included in the first question of the survey and there was are no vulnerable study subjects identified.

Limitations

There are two important limitations to this study. The first limitation is the type of participants. In soliciting feedback only from mental health practitioners, I limited the scope of the study to this population and not to the medical field at large, a group that suffers from burnout in the workplace. The second limitation is that responding practitioners are dispersed throughout the United States and Canada, and there may be some practitioners that deviate from the prescribed treatment method. In order words, a practitioner may deviate from the script of the treatment method and integrate their version of ART.

Success for ART and Practitioner

Certain benchmarks define success in ART and the reduction of fatigue and burnout in the practitioner. In this study, certain factors were identified in the survey about the traits that can make ART successful. If a patient is completing the treatment and the dramatic events are not prevalent with any setbacks then the treatment is successful. As for the practitioner using ART and gaining the trust of the patient and not consistently reliving the dramatic events over an extended period would be considered a success in reducing burnout.

Chapter Summary

The data was used to analyze predictors of burnout in the mental health field and to establish if using ART as a treatment method is beneficial to the practitioner related to reducing stressors associated with treating patients with trauma. This chapter defined the purpose of the study and research questions and defined how the program was evaluated by secondary data analysis of a survey. The setting and population of interest for the study were described in the data collection and analysis methods section. The validation, reliability, and limitations sections were presented.

CHAPTER FOUR:

FINDINGS

Demographics

Gender and Age. There were seven characteristic questions with specific demographic questions related to gender, age group, experience, job title, and location. The results of the participants in the category of gender are 63 respondents are female and seven are male as shown in (Table 2). Thirty-two percent of the practitioners are aged 56-65 and 90% percent of practitioners are over the age of 35 years.

Table 2

Age Group Breakdown of Respondents

Age Group	*N*	%
25-35 yrs old	7	10%
36-45 yrs old	16	23%
46-55 yrs old	19	27%
56-65yrs old	22	32%
66yrs old and over	6	8%
	70	100.00%

Job Title. The second demographic pillar is related to the professional experience or job title of the practitioner. Categories (Table 3) included Psychiatrist (MD or DO), Licensed Professional Counselor, Psychologist (Doctoral level), Marriage and Family Counselor,

Psychologist (Masters Level), Addiction Counselor, Social Worker, and Other. The number of practitioners that answered the (Table 3) questions was 76. The results for (Table 3) show that 42% percent of the practitioners are Social Workers, 34% percent are Psychiatrists, 31% percent are Licensed Professional Counselors, 8% percent are Marriage and Family Counselors, 5% are Addiction Counselors, and 4% percent are Psychologists.

Table 3

Job Titles of Respondents

Job Title	***N***	**%**
Psychiatrist	3	34%
Licensed Professional Counselor	24	31%
Psychologist	3	4%
Marriage and Family Counselor	6	8%
Addiction Counselor	4	5%
Social Worker	32	42%
Other	4	5%
	76	100.00%

Geographic Representation. The third demographic pillar was the area or region where the practitioner is located. Table 4 data is divided into regions of the United States: West Coast, East Coast, and Middle of the United States. Other areas outside of the United States were included, such as Canada and Europe. The number of practitioners that answered the survey was

68. The results shown in (Table 4) indicate that 43% of respondents are located on the East Coast of the United States, 26% are located in Canada, 21% are located in the middle of the United States, 7% are located on the West Coast of the United States, and 3% are located in Europe.

Table 4

Location Breakdown

Location of Practitioner	N	%
East Coast of United States	30	43%
Middle of the United States	15	21%
West Coast of the United States	5	7%
Canada	18	26%
Europe	2	3%
	68	100.00%

Length of Experience of Practitioner. The fourth pillar of demographics is the number of years of experience as a mental health practitioner. The (Table 5) data breakdown was 0-5 years, 5-10 years, 10-15 years, 15-20 years, and over 20 years as a mental health practitioner. Sixty-eight participants responded. Table 5 indicates that 26% of the responding practitioners have over 20 years of experience, 21% have 5-10 years experience, 19% have 10-15 years of experience, 19% have 0-5 years experience, and 15% have 15-20 years experience.

Table 5

Years of Experience Breakdown

Years of Experience	N	%
0-5yrs	13	19%
5-10yrs	14	21%
10-15yrs	13	19%
15-20yrs	10	15%
Greater than 20 years	18	26%
	68	100.00%

ART Treatment

When looking at this theme for ART Treatment several pillars stood out. There were seven ranked questions concerning ART treatment. The first pillar was what characteristic of the practitioner makes ART successful? The second pillar was what traumas are being treated with ART? The third pillar was what percentage has ART increased your practice? The fourth pillar was what percentage of your patients have tried other treatments?

Table 6 includes the reported characteristics that practitioners believe make ART successful. The respondents indicated compassion, confidence in the ART model, creativity, and trust as factors associated with the success of ART. 70 responding practitioners answered this survey question. Forty-one percent indicated confidence in the ART model as the primary characteristic associated with its success. Trust was indicated by 32% of respondents,

compassion was indicated by 17% of respondents, and creativity was identified by 10% of respondents as the key to ART's success.

Table 6

Characteristics of the Practitioner makes ART Successful Breakdown

Characteristic	**N**	**%**
Compassion	12	17%
Confidence in ART Model	29	41%
Creativity	7	10%
Trust	22	32%
	70	100.00%

Traumas Treated with ART. The second pillar of ART treatment is what traumas are treated with ART. 69 practitioners answered the question as shown in Table 7. The multiple-choice options were Combat veterans, Mental Trauma, Sexual Trauma, Physical Trauma, and Other. The results for the primary treatment of trauma were 52% Mental Trauma, 31 % Sexual Trauma, 7% percent Combat Veteran, and 6% percent other, and 4% percent Physical Trauma.

Table 7

Traumas Treated by ART

Type of Trauma	**N**	**%**
Combat Veteran	5	7%
Mental Trauma	36	52%
Sexual Trauma	21	31%
Physical Trauma	3	4%
Other	4	6%
	69	100.00%

Percent ART has Increased Practice. The third pillar of ART treatment is what percentage has ART increased your practice because the practitioner uses ART more than other mental health treatments. There were 68 responding practitioners that answered the survey. The breakdown for data in Table 8 was 0-25%, 26-50%, 51-75%, and over 76%. The results indicate that 49% of practitioners stated it increased 0-25%, 40% stated an increase of 26%-50% in their practice, 7% stated an increase of over 76%, and 4% stated they increase was 51%-75%.

Table 8

ART Practice Increase

Percentage	N	%
0-25%	33	49%
26-50%	27	40%
51-75%	3	4%
Over 76%	5	7%
	68	100.00%

The fourth pillar of the ART treatment is how many patients completed other treatments before they were successful with ART. There were 66 practitioners that answered this survey question. The data breakdown for (Table 9) was 0-25%, 25%-50%, 51-75%, and over 76%. Thirty-six percent of Practitioners stated that 25-50% of their patients completed other treatments before being successful with ART, 24% of practitioners stated 76% of their patients completed other treatments before being successful with ART, 23% of practitioners stated that 51-75% of their patients completed other treatments before being successful with ART and 17% of practitioners stated that 0-25% of their patients completed other treatments before being successful with ART.

Table 9

Treatment Options before a Successful ART Treatment

Percentage	N	%
0-25%	11	17%
25-50%	24	36%
51-75%	15	23%
Over 76%	16	24%
	66	100.00%

WHY ART is Successful

Certain aspects make ART successful. There are seven questions associated with what makes ART successful. I asked practitioners to answer questions related to that success along with the success rate in treating patients using ART. I then asked practitioners to compare ART to other treatment models in their practice and to compare the success rate of ART to other treatment models.

The data shown in Table 10 reflects the reason why the participating practitioners believe that ART is successful. Seventy practitioners answered the survey question. Data categories for Table 10 include time, money, the practitioner, and repeat treatments. As shown in Table 10, 61% of the responding practitioners stated that time is the number one factor for ART success, 22% of the practitioners stated the role of the practitioners in the ART treatment model, and 14% stated money (insurance reimbursement) and 3% indicated repeat treatment as a reason why ART is successful.

Table 10

Why ART is Successful Breakdown

Component	N	%
Time	43	61%
Money	10	14%
Practitioner	15	22%
Repeat Treatments	2	3%
	70	100.00%

The second aspect is the success rate of ART in your practice. There were 68 responding practitioners that answered the survey question. Table 11 shows a breakdown of 0-25%, 26-50%, 51%-75%, and over 76%. Seventy-two percent of respondents indicated a 76% success rate with ART, 24% of practitioners cited a 51-75% success rate, 3% indicated a 26-50% success rate, and 1% indicated a 0-25% success rate.

Table 11

Success Rate of ART in your Practice Breakdown

Success Rate	N	%
0-25%	1	1%
26-50%	2	3%
51-75%	16	24%
Over 76%	49	72%
	68	100.00%

The third compares the usage of ART to other treatments. Seventy practitioners responded. Table 12 shows a categorical breakdown for data as ART, EMDR, PE, and CBT. The results were 43% use EMDR as their primary treatment option. The data also indicates that 28% of practitioners use CBT as their primary treatment option. Consequently, 19% of practitioners use ART as their primary treatment option, and 10% use PE as their primary treatment option.

Table 12

Treatment Options in your Practice Breakdown

Treatment Options	N	%
ART	13	19%
EMDR	30	43%
PE	7	10%
CBT	20	28%
	70	100.00%

Burnout

The last category in the study was burnout associated with treating trauma in mental health practitioners. There were seven questions associated in the survey with burnout factors. The first aspect is the experience of the practitioner with burnout. The second is how the practitioner relieves stress. The third attribute is what the practitioners attribute to burnout.

Table 13 highlights practitioners' responses to the cause of burnout. The breakdown of data points was depersonalization of clients, caseload size, and the severity of client symptoms, emotional exhaustion, and job not a good fit. There were 70 responding practitioners. As shown in Table 13, 53% of practitioners stated emotional exhaustion as the number one factor that causes burnout. The second leading reported cause with 21% was the size of the caseload. The third factor is the severity of client symptoms (19%), followed by depersonalization of clients (4%), and job, not good (3%).

Table 13

Factors that cause Burnout

Factors	**N**	**%**
Depersonalization of Clients	3	4%
Caseload Size	15	21%
The severity of Clients Symptoms	13	19%
Emotional Exhaustion	37	53%
Job not a Good Fit	2	3%
	70	100.00%

The second burnout category addressed how the practitioners relieve stress. As shown in Table 14, the categories reflect strategies practitioners uses to distress and prevent burnout in their job. The strategies include seeing a therapist, maintaining daily habits, exercising, and meditation. Seventy practitioners answered this survey question. The results are recorded in Table 14. Sixty percent of practitioners maintain daily habits, 26% see their therapist, 7% exercise, and 7% meditate.

Table 14

How do I distress to prevent Burnout Breakdown?

Factors	**N**	**%**
Seeing Own Therapist	18	26%
Maintaining Daily Habits	42	60%
Exercising	5	7%
Meditation	5	7%
	70	100.00%

The third factor of burnout is what practitioners believe causes recent burnout in their profession. The answers to what causes burnout were identified in several open-ended questions in the survey and were collected and coded for this table. The breakdown for causes shown in Table 15 are: frustrating parts of treatment protocols, empathy toward patients or lack of support, state regulations, and role conflicts. There were sixty-four responding practitioners that answered this survey question. Sixty-three percent of responding practitioners state that empathy/lack of support is the number one cause for burnout. Twenty percent indicated state regulations, 16% indicated role conflicts within their organization, and 1% indicated frustrating parts of treatment protocols including insurance filings and caseloads.

Table 15

Causes of Recent burnout in Mental Health Practitioners

Factors	**N**	**%**
Frustrating Parts	1	1%
Empathy/Lack of Support	40	63%
State Regulations	13	20%
Role Conflicts	10	16%
	64	100.00%

Practitioners were asked to submit which treatment model most contributes to job burnout. Seventy practitioners answered this survey question. The breakdown of data points was CBT, PE, EMDR, and IPT. Some results collected were recorded in open-ended questions in the survey and coded for this table. As shown in Table 16, 52% of responding practitioners chose CBT as the treatment model that causes burnout. Thirty-three percent selected EMDR, 9% selected PE, and 6% selected IPT. The data suggest why ART is unique compared to other treatments in that the time to complete the treatment compared to other models is the number one factor. When following the treatment model, the ART success rate is over 76%. When asked, the practitioners also suggested that ART is not the primary treatment method used in their practice.

Table 16

Which Treatment Experience Causes Burnout

Treatment	N	%
CBT	37	52%
PE	6	9%
EMDR	23	33%
IPT	4	6%
	70	100.00%

The data for burnout characteristics in mental health practitioners suggest that emotional exhaustion is the number one factor contributing to burnout. Practitioners manage stress by maintaining daily habits like exercising, having a structured day, and keeping a daily journal. The data also suggest that burnout factors increase by 57% percent as a result of a lack of empathy in practitioners' administrative units or companies. The treatment that contributes the greatest to practitioner burnout is CBT.

Chapter Summary

When looking at the data from the study four subjective interpretations emerge. The first one is the practitioner demographics. The second is ART as a treatment. The third is what makes ART successful, and the fourth relates to job burnout. Demographic data indicate participants span a large age range with the majority in the 56-65 age range and who are social workers located on the East Coast of the United States with over 10 years of experience treating mental illnesses.

Limitations

During the collection of results, there were some inconsistencies with the data. Some questions asked about job satisfaction or gave the practitioners an open answer line in which the answers didn't correlate to the question. There were more answers given by practitioners than there was practitioners in the study. Respondents gave answers to other questions and gave reasons why they believe ART could be a possible solution to treating ART. There was also questions about the treatment model being a factor or possible future legislation concerning ART which had no question in the study but was a common answer. I used those answers and collected them as separate answers to the survey and coded them into the results.

Job Burnout and ART Treatment

A common trend continues to grow when comparing other treatments to ART and the success rate. Practitioners that use ART in their practice consistently and follow the treatment model, experience less burnout and job dissatisfaction than any other treatment for PTSD. The success rate of ART in treating PTSD is 25% higher compared to CBT, the leading treatment of PTSD. The only drawback that practitioners are identifying is ART is relatively new to mental health and there are only a few peer-reviewed studies that compare and identify ART as a possible treatment option for mental illness, especially PTSD. While there are only a few studies about ART and hundreds about other treatment options for PTSD the common factor in all the studies is there is a problem of burnout in the practitioner and the patient still needing help after the treatment. ART, so far, has addressed that need of the practitioner and patient and the treatment model continues to grow in the mental health community.

CHAPTER FIVE:

DISCUSSION

When I look back at my research questions about ART, the first research question asks if ART can reduce self-reported mental fatigue and burnout among mental health practitioners. Based on the responses of participants in my survey, the answer to the questions is "yes," and the results show a positive outcome for both practitioner and patient. The overall impact of ART, when used with fidelity, can reduce mental fatigue in practitioners. The practice of ART uses several forms of psychotherapy including rapid eye movement and the reimaging of memories. The treatment also changes the way memories are stored in the brain. ART incorporates the best components of other treatments and allows the practitioner the freedom to stop and refocus or reimage the memories into positive ones. The treatment model allows for specific one-to-one interaction and focuses the patient on reimaging the event with the help of the practitioner. The whole treatment lasts about a week rather than two to three months required in other treatment methods. Each treatment session lasts 60 minutes; the other models require at least two hours. This reduces fatigue in the practitioner and allows for a fresh start between the treatments of patients. There is also no homework or watching session tapes for the practitioner to follow up, which allows more time with the patient and reduces the associated frustration of trying to get homework results from the patient. As a follow-up, to in-person treatment, there is an online treatment option that the patient can use when they are back home and not in the vicinity of a treatment center.

The second research question asked what features or characteristics of ART play a role in the reduction of mental fatigue and burnout among practitioners. Two main factors contribute to the reduction of mental fatigue in the practitioner. The first factor is confidence in the ART treatment model, which concurs with Salyers and associates' (2011) study on self-confidence as a factor for the reduction of burnout among mental health providers. When the practitioner meets with the patient, they set goals for both parties. The practitioner wants to focus on direct outcomes for the patient and tries to find out the *why* of the patient and their experience of the trauma. The relationship builds confidence in the practitioner and enables them to be confident in the ART treatment model and confident in the research that has enabled ART to be adopted as a front-line mental health treatment option. The second feature in the ART model that reduces mental fatigue is trust between patient and practitioner. This is consistent with the study by Benbenishty and Hannink (2015) on restoring trust with the patient. Building trust and creating relationships are vital to the successful completion of the program. The relationship of trust and success of ART starts with one treatment at a time. The practitioner reminds the patient during the session that there will be some difficult times ahead and the only way to successfully overcome this is to trust the practitioner and the treatment model of ART.

With both of the research questions being answered, other things stood out during the analysis. The practitioners who currently use ART are seasoned therapists. According to Skovholt and Ronnestad (2003), young counselors and mental health therapists have trouble adjusting to client care and have expectations of the job that are not realistic. They consequently have increased job dissatisfaction and increased stress levels, leading to burnout or mental fatigue. Skovholt and Trotter-Mathison (2011) discuss how the experienced practitioner uses self-discovery and coping mechanisms to reduce job dissatisfaction and burnout. The second

thing that stood out is the success rate of ART when compared with other treatments. The reported success rate—based on program completion absence of seeking secondary treatments--is over 75% compared to a 50% success rate in other treatments. This research is supported by Waits (2018) in that ART demonstrated a 61% response rate and a 94% completion rate. When compared to other PTSD mental health therapies, the response rate range is 49% to 70%, with a completion rate of 60% to 65%. ART has only been recognized in the literature in the last 15 years versus the other referenced treatments methods, which have been around since the 1960s. The third observation is the CBT model of treatment creates the greatest burnout for practitioners. There is no specific research that identifies CBT as a burnout factor for mental health providers, but according to Morse and associates (2012), 21% to 76% of mental health providers experience high levels of burnout.

In looking at the data one can surmise that ART should be the chosen treatment for PTSD both in the short and long term. The responding practitioners suggest that the ease of the method and length of treatment time benefit not only the patient but also the practitioner. There are also monetary values to the treatment that can benefit both parties. Recently, ART has been adopted by insurance carriers and allows the burden of paying for treatment to be nullified. This is in accordance with the Mental Health Parity and Addiction Parity Act (MHPAEA) of 2008, which requires healthcare providers and group insurers to provide the same level of benefits for mental and/or substance use treatment and services as they do for medical/surgical care. There has also been an increase in online treatments of ART according to the Substance Abuse and Mental Health Services Administration (SAMHSA; 2021). Telemed for mental health therapies allows for the removal of barriers related to geography, psychology, accessibility, employment, or team-

based. Hence, the patient may be comfortably hundreds or thousands of miles away from the practitioner and still receive treatment.

In all, the study helped to identify factors and characteristics that can aid future practitioners in the treatment of mental health, particularly in treating PTSD. It also showcases a treatment model that is not widely used in the United States. It also compared other treatment burnout rates compared to ART. In the coming years, our national mental health issues are only going to be more pronounced-- according to VA (2014) and SAMHSA (2021)—thus increasing the need for qualified, experienced mental health practitioners who need another tool in their toolbox to aid in the treatment of mental or physical trauma. Our national mental healthcare crisis is supported by a Hamm and associates (2020) study in which the reduction in funding and reduction of care availability has led to the influence of the recovery movement in mental health with recent changes to the national healthcare system.

Changing the Playing Field

If the practice of ART is to create change and help people who suffer from traumatic events in their lives, then there has to be a change to mental health treatment protocols. According to Whitebird and associates (2016), there have to be strategies to improve job satisfaction and reduce burnout. For ART to be successful, mental health practitioners need to reduce and improve workflow and communication between the patient and practitioner, lengthen the treatment model, enhance staffing ratios with patients, and follow up with patients after treatment.

The secret to ART success is that the practitioner and patient, over time, develop trust and confidence in one another, which is vital for positive change. Both patients and practitioners need to feel cared for, nurtured, and supported following treatment. According to Kinderman

(2019), scientific and humane alternatives are needed, both for individual care planning and in the design and commissioning of services in mental health.

ART is an innovative treatment for mental health. It has changed what is expected and has created a growth mindset for practitioners as a potential new tool. Through the innovation of ART therapy, patients and practitioners ask the question, how can the patient get better and stop having episodes? Following treatment the patient knows the triggers, and has confidence in the ART model in order to reimage the event; the practitioner can trust in the process and keep the patient-focused on improving their mental health. ART has opened the door to improve mental health treatments and to reduce burnout in practitioners with an easy-to-follow protocol and scaffolding for patient support. For ART to be a more widespread treatment option, all it takes is time for practitioners to hear and see the positive results that ART presents.

Major Findings of Study

In this study there are three major findings. The first one is a gap in the research into ART and how it affects the practitioner. There is currently no peer-reviewed research comparing ART and the affects to the practioner. The second is the results show a positive outcome for the practitioner and patient when using ART in reducing self-reported mental fatigue and burnout. The third is when the ART treatment protocol is followed, ART success rate is over 76% even though ART is not the primary treatment option in the practitioners practice.

Limitations

Some limitations revealed themselves during the study. For instance, the majority of the practitioners are located on the East Coast of the United States. This is likely because the National Training Center is located in Orlando, Florida. Additionally, monetary issues could be a factor in the reporting by practitioners before the adoption of the healthcare provider insurance

regulation of ART. Before this regulation, practitioners could charge between two to five hundred dollars for each treatment session. The regulation allows for a unified co-pay.

Plan for the Future

When I moved to Alaska with my family, one of the primary reasons was to open up an ART treatment center. ART has changed my life for the better and I want other men who have tried other treatments and were unsuccessful to have an opportunity to feel whole again. Next year, I am going to attend a leadership conference for ART in Chicago, which will result in licensing so that I can use ART to treat PTSD.

My treatment model will consist of a treatment center with an attached retreat lodge where veterans can come and live for a week with their significant others, receive treatment, and explore Alaska. My treatment model will consist of week-long ART treatments followed by spousal support counseling. The treatment model will be structured each day with morning treatments that include meditation and yoga and afternoon activities incorporating Alaskan adventures. The cost of the treatment will be free to patients and offset by donations from charities like Wounded Warriors and the Chris Kyle Foundation. I know that to innovate and change the mental health landscape, a major focus must be on the way ART is used to change how PTSD is treated.

REFERENCES

Acker, G. M. (2012). Burnout among mental health care providers. *Journal of Social Work*, *12*(5), 475-490. http://ezproxy.lib.usf.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsbl&AN=RN350715963&site=eds-live

Acker, G. M., & Lawrence, D. (2009). Social work and managed care: Measuring competence, burnout, and role stress of workers providing mental health services in a managed care era. *Journal of Social Work, 9*(3), 269–283.

Adler, A. B., Adrian, A. L., Hemphill, M., Scaro, N. H., Sipos, M. L., & Thomas, J. L. (2017). Professional stress and burnout in U.S. military medical personnel deployed to Afghanistan. *Military Medicine, 182*(3/4), e1669–e1676. https://doi-org.ezproxy.lib.usf.edu/10.7205/MILMED-D-16-00154

Ahs, F., Kragel, P. A., Zielinski, D. J., Brady, R., & LaBar, K. S. (2015). Medial prefrontal pathways for the contextual regulation of extinguished fear in humans. *NeuroImage, 122*, 262–271. http://dx.doi.org/10.1016/j.neuroimage.2015.07.051

Armstrong, T., Bilsky, S. A., Zhao, M., & Olatunji, B. O. (2013). Dwelling on potential threat cues: An eye movement marker for combat-related ptsd. *Depression and Anxiety*, *30*(5), 497-502. doi: 10.1002/da.22115

Balbo, M. (2016). *EMDR: A tool for dialogue between psychotherapies*. Editor: McGraw-Hill Education Italy. EAN: 9788838672613 ISBN: 978-8-83-867261-3. https://www.ilovebooks.it/emdr-strumento-dialogo-psicoterapie-p-1201.html

Balbo, M., Cavallo, F., & Fernandez, I. (2019). Integrating EMDR in psychotherapy. *Journal of Psychotherapy Integration*, *29*(1), 23-31. https://doi.org/10.1037/int0000136

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309–328.

Barrera, T. L., Cully, J. A., Amspoker, A. B., Wilson, N. L., Kraus- Schuman, C., Wagener, P. D., . . . Stanley, M. A. (2015). Cognitive behavioral therapy for late-life anxiety: Similarities and differences between veteran and community participants. *Journal of Anxiety Disorders, 33*, 72–80. http://dx.doi.org/10.1016/j.janxdis.2015.04.005

Benbenishty, J.S., Hannink, J.R. (2015). Non-verbal communication to restore patient–provider trust. *Intensive Care Med* 41**,** 1359–1360. doi: 10.1007/s00134-015-3710-8

Bourdon, D.-É., El-Baalbaki, G., Girard, D., Lapointe-Blackburn, É., & Guay, S. (2019). Schemas and coping strategies in cognitive-behavioral therapy for PTSD: A systematic review. *European Journal of Trauma & Dissociation, 3*(1), 33–47. doi: 10.1016/j.ejtd.2018.09.005

Bradley, R., Schwartz, A. C., & Kaslow, N. J. (2005). Posttraumatic stress disorder symptoms among low-income, African American women with a history of intimate partner violence and suicidal behaviors: Self-esteem, social support, and religious coping. *Journal of Traumatic Stress, 18*(6), 685–696. http://dx.doi.org/10.1002/jts.20077

Brown, L. A., McLean, C. P., Zang, Y., Zandberg, L., Mintz, J., Yarvis, J. S., … Foa, E. B. (2019). Does prolonged exposure increase suicide risk? Results from an active duty military sample. *Behaviour Research and Therapy, 118*, 87–93. https://psycnet.apa.org/doi/10.1016/j.brat.2019.04.003

Cigrang, J. A., Rauch, S. A. M., Mintz, J., Brundige, A., Avila, L. L., Bryan, C. J., … Peterson, A. L. (2015). Treatment of active duty military with PTSD in primary care: A follow-up report. *Journal of Anxiety Disorders, 36*, 110–114. https://doi.org/10.1016/j.janxdis.2015.10.003

Cohen, J. A. (2003). Managed care and the evolving role of the clinical social worker in mental health. *Social Work, 48*(1), 34–43. Doi 10.1093/sw/48.1.34

Cooper, A. A., Clifton, E. G., & Feeny, N. C. (2017). An empirical review of potential mediators and mechanisms of prolonged exposure therapy. *Clinical Psychology Review, 56*, 106–121. doi: 10.1016/j.cpr.2017.07.003

Conard, & Sauls, D. J. (2014). Deployment and PTSD in the Female Combat Veteran: A Systematic Review. Nursing Forum (Hillsdale), 49(1), 1–10. https://doi.org/10.1111/nuf.12049

Dickstein, B. D., Weathers, F. W., Angkaw, A. C., Nievergelt, C. M., Yurgil, K., Nash, W. P., … Litz, B. T. (2015). Diagnostic utility of the Posttraumatic Stress Disorder (PTSD) Checklist for identifying full and partial PTSD in active-duty military. *Assessment, 22*(3), 289–297. https://doi.org/10.1177/1073191114548683

Dreison, K. C., White, D. A., Bauer, S. M., Salyers, M. P., & McGuire, A. B. (2018). Integrating Self-Determination and Job Demands-Resources Theory in Predicting Mental Health Provider Burnout. *Administration and Policy in Mental Health and Mental Health Services Research*, *45*, 121-130. doi: 10.1007/s10488-016-0772-z

Eftekhari, A., Ruzek, J. I., Crowley, J. J., Rosen, C. S., Greenbaum, M. A., & Karlin, B. E. (2013). Effectiveness of national implementation of prolonged exposure therapy in veterans affairs care. *JAMA Psychiatry, 70*(9), 949–955. doi: 10.1001/jamapsychiatry.2013.36

Feldman, R. (2001). Health care and social work education in a changing world. *Social Work in Health Care, 34*(1-2), 31–41. https://doi.org/10.1080/00981380109517015

Finley, E. P., Garcia, H. A., Ketchum, N. S., McGeary, D. D., McGeary, C. A., Stirman, S. W., & Peterson, A. L. (2015). Utilization of evidence-based psychotherapies in Veterans Affairs posttraumatic stress disorder outpatient clinics. *Psychological Services, 12*(1), 73–82. http://dx.doi.org/10.1037/ser0000014

Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin, 99*(1), 20–35. https://psycnet.apa.org/doi/10.1037/0033-2909.99.1.20

Foa, E. B., Riggs, D. S., Dancu, C. V., & Rothbaum, B. O. (1993). Reliability and validity of a brief instrument for assessing post-traumatic stress disorder. *Journal of Traumatic Stress, 6*(4), 459–473. http://dx.doi.org/10.1002/jts.2490060405

Foa, E. B., Zandberg, L. J., McLean, C. P., Rosenfield, D., Fitzgerald, H., Tuerk, P. W., … Peterson, A. L. (2019). The efficacy of 90-minute versus 60-minute sessions of prolonged exposure for posttraumatic stress disorder: Design of a randomized controlled trial in active duty military personnel. *Psychological Trauma: Theory, Research, Practice, and Policy, 11*(3), 307–313. https://psycnet.apa.org/doi/10.1037/tra0000351

Forbes, D., Creamer, M., & Biddle, D. (2001). The validity of the PTSD checklist as a measure of symptomatic change in combat-related PTSD. Behavior Research and Therapy, *39*(8), 977-986. doi:10.1016/S0005-7967(00)00084-X

Garcia, H. A., McGeary, C. A., McGeary, D. D., Finley, E. P., & Peterson, A. L. (2014). Burnout in Veterans Health Administration mental health providers in posttraumatic stress clinics. *Psychological Services*, *11*(1), 50-59. doi: 10.1037/a0035643

Garcia, McGeary, C. A., Finley, E. P., Ketchum, N. S., McGeary, D. D., & Peterson, A. L. (2015). Evidence-Based Treatments for PTSD and VHA Provider Burnout: The Impact of Cognitive Processing and Prolonged Exposure Therapies. Traumatology (Tallahassee, Fla.), 21(1), 7–13. https://doi.org/10.1037/trm0000014

Gobin, R. L., Mackintosh, M.-A., Willis, E., Allard, C. B., Kloezeman, K., & Morland, L. A. (2018). Predictors of differential PTSD treatment outcomes between veteran and civilian women after cognitive processing therapy. *Psychological Trauma: Theory, Research, Practice, and Policy, 10*(2), 173–182. https://psycnet.apa.org/doi/10.1037/tra0000266

Gorman, L. A., Blow, A. J., Ames, B. D., & Reed, P. L. (2011). National Guard families after combat: Mental health, use of mental health services, and perceived treatment barriers. *Psychiatric Services, 62*(1), 28-34. doi:10.1176/appi.ps.62.1.28

Gradus, J. L., Qin, P., Lincoln, A. K., Miller, M., Lawler, E., H.T., S., et al. (2010). Posttraumatic stress disorder and completed suicide. *American Journal of Epidemiology, 171*(6), 721–727. https://doi.org/10.1093/aje/kwp456

Guina, Welton, R. S., Broderick, P. J., Correll, T. L., & Peirson, R. P. (2016). DSM-5 Criteria and Its Implications for Diagnosing PTSD in Military Service Members and Veterans. Current Psychiatry Reports, 18(5), 1–9. https://doi.org/10.1007/s11920-016-0686-1

Hall, M. L., & Keefe, R. H. (2000). Exploring 'The managed behavioral health care provider self-perceived competence scale': A tool for continuing professional education. *Professional Development: The International Journal of Continuing Social Work Education, 3*(3), 27–35.

Hernandez, D. F., Waits, W., Calvio, L., & Byrne, M. (2016). Practice comparisons between accelerated resolution therapy, eye movement desensitization and reprocessing and cognitive processing therapy with case examples. *Nurse Education Today, 47*, 74–80. doi: 10.1016/j.nedt.2016.05.010

Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine, 351*, 13-22. doi:10.1056/NEJMoa040603

Holliday, R., Borges, L. M., Stearns-Yoder, K. A., Hoffberg, A. S., Brenner, L. A., & Monteith, L. L. (2020). Posttraumatic stress disorder, suicidal ideation, and suicidal self-directed violence among U.S. military personnel and veterans: A systematic review of the literature from 2010 to 2018. Frontiers in Psychology, 11, Article e1998. https://doi.org/10 .3389/fpsyg.2020.01998

Horwitz, A. V. (2018). *PTSD: A short history*. Johns Hopkins University Press.

Hundt, N. E., Barrera, T. L., Robinson, A., & Cully, J. A. (2014). A systematic review of cognitive behavioral therapy for depression in veterans. *Military Medicine, 179*(9), 942–949. https://psycnet.apa.org/doi/10.7205/MILMED-D-14-00128

Hundt, N. E., Helm, A., Smith, T. L., Lamkin, J., Cully, J. A., & Stanley, M. A. (2018). Failure to engage: A qualitative study of veterans who decline evidence-based psychotherapies for PTSD. *Psychological Services, 15*(4), 536–542. https://psycnet.apa.org/doi/10.1037/ser0000212

Hamm, J.A., Rutherford, S., Wiesepaper, C.N., & Lysaker, P.H. (2020). Community Mental Health Practice in the United States: Past, Present and Future. *Consortium Psychiatricum, 1*(2), 7–13. https://www.consortium-psy.com

Karlin, B. E., Ruzek, J. I., Chard, K. M., Eftekhari, A., Monson, C. M., Hembree, E. A., . . . Foa, E. B. (2010). Dissemination of evidence-based psychological treatments for posttraumatic stress disorder in the Veterans Health Administration. *Journal of Trauma Stress, 23*(6), 663–673. doi:10.1002/jts.20588

Kessler, R. C., Borges, G., & Walters, E. E. (1999). Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. *Archives of General Psychiatry, 56*(7), 617–626. https://doi.org/10.1001/archpsyc.56.7.617

Khazaie, H., Ghadami, M. R., & Masoudi, M. (2016). Sleep disturbances in veterans with chronic war-induced PTSD. *Journal of Injury & Violence Research*, *8*(2), 99–107. https://doi.org/10.5249/jivr.v8i2.808

Kim, P. Y., Thomas, J. L., Wilk, J. E., Castro, C. A., & Hoge, C. W. (2010). Stigma, barriers to care, and use of mental health services among active duty and National Guard soldiers after combat. *Psychiatric Services, 61*(6), 582-588. https://doi.org/10.1176/ps.2010.61.6.582

Kinderman, P. (2019). *A manifesto for mental health: Why we need a revolution in mental health care* (1st ed). Springer International Publishing.

Kip, K. E., D'Aoust, R. F., Hernandez, D. F., Girling, S. A., Cuttino, B., Long, M. K., … Rosenzweig, L. (2016). Evaluation of brief treatment of symptoms of psychological trauma among veterans residing in a homeless shelter by use of Accelerated Resolution Therapy. *Nursing Outlook*, *64*(5), 411–423. https://doi.org/10.1016/j.outlook.2016.04.006

Kip, K. E., Hernandez, D. F., Shuman, A., Witt, A., Diamond, D. M., Davis, S. … Rosenzweig, L. (2015). Comparison of Accelerated Resolution Therapy (ART) for Treatment of Symptoms of PTSD and Sexual Trauma between Civilian and Military Adults. *Military Medicine*, 180(9), 964–971. doi: 10.7205/MILMED-D-14-00307

Kip, K. E., Rosenzweig, L., Hernandez, D. F., Shuman, A., Sullivan, K. L., Long, C. J., Wittenberg, T. (2013). Randomized Controlled Trial of Accelerated Resolution Therapy (ART) for Symptoms of Combat-Related Post-Traumatic Stress Disorder (PTSD). *Military Medicine*, *178*(12), 1298-1309. doi: 10.7205/MILMED-D-13-00298

Kip, K. E., Shuman, A., Hernandez, D. F., Diamond, D. M., & Rosenzweig, L. (2014). Case Report and Theoretical Description of Accelerated Resolution Therapy (ART) for Military-Related Post-Traumatic Stress Disorder. *Military Medicine*, *179*(1), 31-37. DOI: 10.7205/MILMED-D-13-00229

Kip, K.E., Rosenzweig, L., Hernandez, D.F., Shuman, A., Diamond, D.M., Girling, S.A., Sullivan, K.L., Wittenberg, T., Witt, A., Lengacher, C.A., Anderson, B., & McMilan, S.C. (2014). Accelerated resolution therapy for treatment of pain secondary to symptoms of combat-related posttraumatic stress disorder. *European Journal of Psychotraumatology,* 5(1), 24066-12. doi: 10.3402/ejpt.v5.24066

Lee, M. R. G., Breitstein, J., Hoyt, T., Stolee, J., Baxter, T., Kwon, H., & Mysliwiec, V. (2019). Cognitive behavioral therapy for insomnia among active duty military personnel. *Psychological Services*, *18*(1), 42-50. https://psycnet.apa.org/doi/10.1037/ser0000340

Leiter, M. P., & Schaufeli, W. B. (1996). Consistency of the burnout construct across occupations. *Anxiety, Stress & Coping, 9*(3)*,* 229–243. doi:10.1080/10615809608249404

Life Skills South Florida.(n.d.). Cognitive Behavioral Therapy.LifeSkills. Retrieved July 31, 2019 from https://www.lifeskillssouthflorida.com/mental-health-treatment/mental-health-therapies/cognitive-behavioral-therapy/

Lu, M. W., Plagge, J. M., Marsiglio, M. C., & Dobscha, S. K. (2016). Clinician documentation on receipt of trauma-focused evidence-based psychotherapies in a VA PTSD clinic. *The Journal of Behavioral Health Services & Research*, *43*(1), 71–87. doi: 10.1007/s11414-013-9372-9

Lu, Y. E., Miller, M. H., & Chen, S. (2002). American revolution in mental health care delivery: Meeting the educational challenge. *Journal of Teaching in Social Work*, *22*(1-2), 167–182. https://doi.org/10.1300/J067v22n01_11

Maher, M. J., Rego, S. A., & Asnis, G. M. (2006). Sleep disturbances in patients with post-traumatic stress disorder: Epidemiology, impact and approaches to management. *CNS Drugs, 20*, 567–590. https://rdcu.be/cA2fD

Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personnel stress and what to do about it.* Jossey-Bass.

Matto, McNiel, D. E., & Binder, R. L. (2019). A Systematic Approach to the Detection of False PTSD. The Journal of the American Academy of Psychiatry and the Law, 47(3), 325–334. https://doi.org/10.29158/JAAPL.003853-19

McLay, R. N., Klam, W. P., & Volkert, S. L. (2010). Insomnia is the most commonly reported symptom and predicts other symptoms of posttraumatic stress disorder in U.S. service members returning from military deployments. *Military Medicine, 175*(10), 759 –762. https://doi.org/10.7205/MILMED-D-10-00193

McLay, R. N., Webb-Murphy, J. A., Fesperman, S. F., Delaney, E. M., Gerard, S. K., Roesch, S. C., … Johnston, S. L. (2016). Outcomes from eye movement desensitization and reprocessing in active-duty service members with posttraumatic stress disorder. Psychological Trauma: *Theory, Research, Practice, and Policy, 8(6), 702–708.* doi: 10.1037/tra0000120

Morland, L. A., Mackintosh, M. A., Rosen, C. S., Willis, E., Resick, P., Chard, K., & Frueh, B. C. (2015). Telemedicine versus in-person delivery of cognitive processing therapy for women with posttraumatic stress disorder: A randomized non-inferiority trial. *Depression and Anxiety, 32*(11), 811–820. doi: 10.1002/da.22397

Mott, J. M., Mondragon, S., Hundt, N. E., Beason-Smith, M., Grady, R. H., & Teng, E. J. (2014). Characteristics of U.S. veterans who begin and complete prolonged exposure and cognitive processing therapy for PTSD. *Journal of Traumatic Stress, 27*(3), 265–273. doi: 10.1002/jts.21927

Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its remediation. *Administration and Policy in Mental Health and Mental Health Services Research, 39*(5), 341-352. doi: 10.1007/s10488-011-0352-1

Myers, U. S., Haller, M., Angkaw, A. C., Harik, J. M., & Norman, S. B. (2019). Evidence-based psychotherapy completion and symptom improvement among returning combat veterans with PTSD. *Psychological Trauma: Theory, Research, Practice, and Policy*, *11*(2), 216–223. https://psycnet.apa.org/doi/10.1037/tra0000360

Nacasch, N., Huppert, J. D., Su, Y. J., Kivity, Y., Dinshtein, Y., Yeh, R., & Foa, E. B. (2015). Are 60-minute prolonged exposure sessions with 20-minute imaginal exposure to traumatic memories sufficient to successfully treat PTSD? A randomized noninferiority clinical trial. *Behavior Therapy, 46*(3), 328 –341. doi: 10.1016/j.beth.2014.12.002

Panagioti, M., Gooding, P. A., & Tarrier, N. (2012). A meta-analysis of the association between posttraumatic stress disorder and suicidality: The role of comorbid depression. Comprehensive Psychiatry, 53(7), 915–930. https://doi.org/10.1016/j.comppsych.2012.02.009

Panagioti, M., Gooding, P., & Tarrier, N. (2009). Post-traumatic stress disorder and suicidal behavior: A narrative review. Clinical Psychology Review, 29(6), 471–482. https://doi.org/10.1016/j.cpr.2009.05.

Possemato, K., Johnson, E. M., Emery, J. B., Wade, M., Acosta, M. C., Marsch, L. A., … Maisto, S. A. (2019). A pilot study comparing peer supported web-based CBT to self-managed web CBT for primary care veterans with PTSD and hazardous alcohol use. *Psychiatric Rehabilitation Journal, 42*(3), 305–313. doi: 10.1037/prj0000334

Pumariega, A. J., Winters, N. C., & Huffine, C. (2003). The evolution of systems of care for children's mental health: Forty years of community child and adolescent psychiatry. *Community Mental Health Journal*, *39*(5), 399–425. https://psycnet.apa.org/doi/10.1023/A:1025808902438

Remedy Health Care (2021). *What is PTSD? Post-Traumatic Stress Disorder Symptoms and Causes*. http://www.psycom.net/post-traumatic-stress-disorder/

Resick, P.A., Schnicke, M.K., 1992. Cognitive processing therapy for sexual assault victims. *Journal of Consulting and Clinical Psychology, 60*(5), 748–756. https://doi.org/10.1037/0022-006X.60.5.748

Rousseau, P. F., El Khoury-Malhame, M., Reynaud, E., Zendjidjian, X., Samuelian, J. C., & Khalfa, S. (2019). Neurobiological correlates of EMDR therapy effect in PTSD. European *Journal of Trauma & Dissociation*, *3*(2), 103–111. https://doi.org/10.1016/j.ejtd.2018.07.001

Rubin, A. (2003). Unanswered questions about the empirical support for EMDR in the treatment of PTSD: A review of research. *Traumatology, 9*(1), 4–30. https://psycnet.apa.org/doi/10.1177/153476560300900102

Salyers, M. P. et al. (2011). BREATHE: A pilot study of a one-day retreat to reduce burnout among mental health professionals. *Psychiatric Services, 62*(2), 214–217. doi:10.1176/appi.ps.62.2.214

Substance Abuse and Mental Health Services Administration (SAMHSA; 2021). *Telehealth for the treatment of serious mental illness and substance use disorders* (SAMHSA Publication No. PEP21-06-02-001). National Mental Health and Substance Use Policy Laboratory. https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP21-06-02-001.pdf

Scheid, T. L. (2003). Managed care and the rationalization of mental health services. *Journal of Health and Social Behavior*, *44*(2), 142–161.

Scheid, T. L., & Greenley, J. R. (1997). Evaluations of organizational effectiveness in mental health programs. *Journal of Health and Social Behavior*, *38*(4), 403–426. https://psycnet.apa.org/doi/10.2307/2955434

Schneiderman, A. I., Braver, E. R., & Kang, H. K. (2008). Understanding sequelae of injury mechanisms and mild traumatic brain injury incurred during the conflicts in Iraq and Afghanistan: Persistent post concussive symptoms and posttraumatic stress disorder. American *Journal of Epidemiology*, *167*(12), 1446-1452. doi:10.1093/aje/kwn068

Schultebraucks, Qian, M., Abu-Amara, D., Dean, K., Laska, E., Siegel, C., Gautam, A., Guffanti, G., Hammamieh, R., Misganaw, B., Mellon, S. H., Wolkowitz, O. M., Blessing, E. M., Etkin, A., Ressler, K. J., Doyle, F. J., Jett, M., & Marmar, C. R. (2020). Pre-deployment risk factors for PTSD in active-duty personnel deployed to Afghanistan: a machine-learning approach for analyzing multivariate predictors. Molecular Psychiatry, 26(9), 5011–5022. https://doi.org/10.1038/s41380-020-0789-2

Shapiro, F. (1994). *Eye movement desensitization and reprocessing: Basic principles, protocols and procedures.* Guilford Press.

Shem, D. L., & Trabin, T. (1997). System changes and accountability for behavioral health care services: Lessons from the private and public sectors. In E. J. Mullen & J. L. Magnabosco (Eds.), *Outcome measurement in the human services: Cross-cutting issues and methods* (pp. 101–112). NASW Press.

Shiner, B., D'Avolio, L. W., Nguyen, T. M., Zayed, M. H., Young-Xu, Y., Desai, R. A., . . . Watts, B. V. (2013). Measuring use of evidence based psychotherapy for posttraumatic stress disorder. *Administration and Policy in Mental Health and Mental Health Services, 40(4), 311-8.* doi: 10.1007/s10488-012-0421-0

Skorupa, & Agresti, A. A. (1993). Ethical Beliefs About Burnout and Continued Professional Practice. Professional Psychology, Research and Practice, 24(3), 281–285. https://doi.org/10.1037/0735-7028.24.3.281

Skovholt, T. M., & Ronnestad, M. H. (2003). Struggles of the novice counselor and therapist. *Journal of Career Development, 30(1),* 45–58. https://doi.org/10.1177%2F089484530303000103

Skovholt, T. M., & Trotter-Mathison, M. (2011). *The resilient practitioner: Burnout prevention and self care strategies for counselors, therapists, teachers, and health professionals (2nd ed.). Routledge.*

Smoot, S. L., & Gonzales, J. L. (1995). Cost-effective communication skills training for state hospital employees. *Psychiatric Services, 46*(8), 819–822. doi: 10.1176/ps.46.8.819

Spence, J., Titov, N., Johnston, L., Jones, M. P., Dear, B. F., & Solley, K. (2014). Internet-based trauma-focused cognitive behavioral therapy for PTSD with and without exposure components: A randomized controlled trial. *Journal of Affective Disorders*, *162*, 73–80. DOI: 10.1016/j.jad.2014.03.009

Steenkamp, M.M., Litz, B.T., Hoge, C.W., Marmar, C.R. (2015). Psychotherapy for Military-related PTSD: a review of randomized clinical trials. *Journal of the American Medical Association, 314*(5), 489–500. doi: 10.1001/jama.2015.8370.

Stickgold, R. (2002). EMDR: A putative neurobiological mechanism of action. *Journal of Clinical Psychology, 58*(1): 61-75. doi: 10.1002/jclp.1129

Tanielian, T., Farris, C., Batka, C., Farmer, C. M., Robinson, E., Engel, C. C... Jaycox, L. H. (2014). *Ready to serve: Community-based provider capacity to deliver culturally competent, quality mental health care to veterans and their families*. RAND Corporation. https://doi.org/10.7249/RR806

Tessler, R., Rosenheck, R., & Gamache, G. (2002). Comparison of homeless veterans with other homeless men in a large clinical outreach program. *Psychiatric Quarterly, 73*(2), 109-119. doi: 10.1023/a:1015051610515

Thomsen, S., Soares, J., Nolan, P., Dallender, J., & Arnetz, B. (1999). Feelings of professional fulfillment and exhaustion in mental health personnel: The importance of organizational and individual factors. *Psychotherapy and Psychosomatics, 68*, 157–164. doi:10.1159/000012325

Thomas, J. L., Wilk, J. E., Riviere, L. A., McGurk, D., Castro, C. A., & Hoge, C. W. (2010). Prevalence of mental health problems and functional impairment among Active Component and National Guard soldiers 3 and 12 months following combat in Iraq. *Archives of General Psychiatry, 67*, 614-623. doi:10.1001/archgenpsychiatry.2010.54

Tsai, J., Mares, A. S., & Rosenheck, R.A. (2012). Do homeless veterans have the same needs and outcomes as non-veterans? *Military Medicine, 177*, (1) 27-31. https://doi.org/10.7205/MILMED-D-11-00128

Ursano, R. J., Bell, C., Eth, S., Friedman, M., Norwood, A., Pfefferbaum, B., Pynoos, J. D., Zatzick, D. F., Benedek, D. M., McIntyre, J. S., Charles, S. C., Altshuler, K., Cook, I., Cross, C. D., Mellman, L., Moench, L. A., Norquist, G., Twemlow, S. W., Woods, S., Yager, J., … Steering Committee on Practice Guidelines (2004). Practice guideline for

the treatment of patients with acute stress disorder and posttraumatic stress disorder. *The American journal of psychiatry*, *161*(11 Suppl), 3–31.

Van Minnen, A., & Foa, E. B. (2006). The effect of imaginal exposure length on outcome of treatment for PTSD. *Journal of Traumatic Stress, 19*(4), 427– 438. https://doi.org/10.1002/jts.20146

Veterans Health Administration. (2014). *Report on VA facility specific Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) veterans diagnosed with potential or provisional **PTSD**: Cumulative from 1st Qtr FY 2002 through 1st Qtr FY 2014 (October 1, 2001-December 31, 2013)*. U.S. Department of Veterans Affairs. https://www.publichealth.va.gov/docs/epidemiology/ptsd-report-fy2014-qtr1.pdf

Verwoerd, J., Wessel, I., de Jong, P.J. (2012). Fewer intrusions after an attentional bias modification training for perceptual reminders of analogue trauma. *Cognition and Emotion, 26*(1), 153–165. https://psycnet.apa.org/doi/10.1080/02699931.2011.563521

Waits, W. (2018) Accelerated Resolution Therapy for PTSD. *The Psychiatric Times, 35*(8), 14–15. https://www.psychiatrictimes.com/view/accelerated-resolution-therapy-ptsd

Waldman, J. D., Kelly, F., Aurora, S., & Smith, H. L. (2004). The shocking cost of turnover in health care. *Health Care Management Review, 29*(1), 2–7. doi: 10.1097/00004010-200401000-00002

Washington, D. L., Yano, E. M., McGuire, J., Hines, V., Lee, M., & Gelberg, L. (2010). Risk factors for homelessness among women veterans. *Journal of Health Care Poor Underserved, 21*(2), 81-91. doi: 10.1353/hpu.0.0237

Walters, E. M., Jenkins, M. M., Nappi, C. M., Clark, J., Lies, J., Norman, S. B., & Drummond, S. P. A. (2020). The impact of prolonged exposure on sleep and enhancing treatment outcomes with evidence-based sleep interventions: A pilot study. *Psychological Trauma: Theory, Research, Practice, and Policy, 12*(2), 175-185, doi: 10.1037/tra0000478

Weathers, F. W., Litz, B. T., Herman, D. S., Huska, J. A., & Keane, T. M. (1993, October). *The PTSD Checklist (PCL): Reliability, validity, and diagnostic utility* [Conference presentation].. International Society for Traumatic Stress Studies 1992 Conference, San Antonio, TX, United States.

Whitebird, R. R., et al. (2016). Clinician burnout and satisfaction with resources in caring for complex patients. *General Hospital Psychiatry, 44*, 91–95. doi: 10.1016/j.genhosppsych.2016.03.004

Wilkins, K. C., Lang, A. J., & Norman, S. B. (2011). Synthesis of the psychometric properties of the PTSD checklist (PCL) military, civilian, and specific versions. *Depression and Anxiety, 28*(7), 596-606. doi:10.1002/da.20837

Williams, J.M., Mathews, A., & MacLeod, C. (1996). The emotional stroop task and psychopathology. *Psychological Bulletin, 120*(1): 3–24. doi: 10.1037/0033-2909.120.1.3

World Health Organization. (2019, May 28). *Burn-out has been added to the World Health Organisation's International Classification of Diseases. https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases*

Ye Hee Lee, M. (2015). The missing context behind the widely cited statistic that there are 22 veteran suicides a day. In Washington Post – Blogs. WP Company LLC d/b/a *The Washington Post*.

APPENDIX A

SURVEYS

Survey Questions from Pilot Study

1. I understand the purpose of this research study and (_____ do _____ do not) agree to participate. If I answered "do not," I may stop here and return this questionnaire to the facilitator.

2. Male _____Female _____

3. Age: _____
    a. 25-35
    b. 36-45
    c. 46- 55
    d. 56- 65
    e. Above 66

4. Professional Discipline: if more than one applies, select the role in which you most likely use ART:

    a. Psychiatrist

    b. Licensed Professional Counselor

    c. Psychologist, doctoral-level

    d. Marriage and Family Counselor

    e. Psychologist, master-level

    f. Addiction Counselor

    g. Social Worker

    h. Other

5. Dates of Basic ART Training: _____

6. Location of Basic ART Training: _____

7. Including training, how many years of professional experience have you had treating mental illness?

    a. 0-5 years

    b. 5-10 years

    c. 10-15 years

    d. 15-20 years

    e. Greater than 20 years

8. Your experience with other types of psychotherapy:

Type of Psychotherapy	Trained in	Use Regularly
a. Cognitive Behavioral Therapy (CBT)		
b. Trauma- Focused Cognitive Behavioral Therapy (TF-CBT)		
c. Prolonged Exposure (PE)		
d. Eye- Movement Desensitization & Reprocessing (EMDR)		
e. Interpersonal Therapy (IPT)		
f. Psychodynamic Psychotherapy		
g. Supportive Psychotherapy		
h. Dialectical Behavioral Therapy (DBT)		

9. Type of Practice:

a. Private Practice
b. Group-based Private Practice
c. Private Hospital
d. Public/ State Hospital
e. Federal (Military/ VA) Hospital
f. Other

10. Approximately how many total ART sessions have you done since your training?

Total ART Sessions Completed	*N* Sessions Administered
a. 0-5	
b. 6-30	
c. 31-100	
d. 101-200	
e. More than 200	

11. Estimate the percent of time you spend using each of the following techniques when treating trauma (total must add up to 100%)

Technique	Percent of Time
a. ART	
b. TF-CBT	
c. CPT	
d. PE	
e. EMDR	
f. Other	

12. In what ways has learning ART affected your clinical practice?

13. How would you rate ART compared to other trauma therapies you have used?

a. Significantly more effective than other trauma therapies
b. Somewhat more effective than other trauma therapies
c. About the same as other trauma therapies
d. Somewhat less effective than other trauma therapies
e. Significantly less effective than other trauma therapies
f. Not sure because I have only been trained in ART

14. Are you a veteran or active service member of the United States Military?

Yes

No

If yes, what branch of service _____.

15. What type of trauma do you usually treat with ART?

a. Combat Veteran
b. Physical Trauma
c. Mental Trauma
d. Sexual Trauma
e. Other

16.In your opinion, what characteristic do ART practitioners need to have in order for the treatment to be successful?

17.In your practice, besides the ART treatment method, what factor(s) do you believe makes the patient feel receptive to ART?

a. Your ability to develop trust

b. Your ability to be an advocate for the patient

c. Your ability to communicate effectively

d. Your ability to listen

e. Your ability to be sensitive to the patient

f. Other

18. As a practitioner, how many articles on the current medical research on trauma(s) do you read per month?

Number of Articles Read Per Month

a. 0-5

b. 6-10

c. 11-20

d. over 20

19. As a practitioner, how much has ART treatment increased your practice?

Percent Increase in Practice

a. 0-25%

b. 26-50%

c. 51-75%

d. over 76%

e. Not Applicable

20. Would you recommend ART to other mental health professionals?

a. Yes

b. No

c. Not Applicable

21. As a practitioner, what percentage of your patients have tried other treatments before being successful in ART?

Percent of Patients who Tried Other Treatments before Succesful with ART

a. 0-25%

b. 26-50%

c. 51-75%

d. over 76%

22. Please rank-order from (1-7), the following reasons for patients not completing their course of ART:

a. They improved to the point they did not need / desire additional sessions.
b. ART was only used to catalyze other therapies or to help the patient move past “stuck points”
c. The patient preferred a different type of psychotherapy.
d. The treatment setting did not permit me to provide a full course of ART (ED, inpatient,consults, etc.).
e. The patient stopped scheduling ART appointments
f. The patient moved, the provider moved, or we had some other logistical challenge
g. Other

23. In your practice, what is the success rate of the patient in the ART treatment?

Success Rate of ART in Your Practice

a. 0-25%
b. 26-50%
c. 51-75%
d. over 76%

24. Please rank-order from (1-7), the following reasons for patients not completing their course of ART:

---

a. They improved to the point they did not need / desire additional sessions.

b. ART was only used to catalyze other therapies or to help the patient move past "stuck points".

c. The patient preferred a different type of psychotherapy.

d. The treatment setting did not permit me to provide a full course of ART (ED, inpatient, consults, etc.).

e. The patient stopped scheduling ART appointments.

f. The patient moved, the provider moved, or we had some other logistical challenge.

g. Other

---

25. Would you consider yourself a self-transcendence or a self-enhancement mental health provider?

A. self-transcendence
B. self-enhancement

27. What would you consider the most important part of your job satisfaction?

28. In your opinion what is the most frustrating part of your job as a mental health provider? Please label from 1 to 4. (1 being the most frustrating and 4 the least frustrating)

a. A feeling of inadequacy in performing many activities, especially those for which the staff had received poor training and supervision, such as mental health consultation;

b. A lack of direct and immediate feedback concerning results in many work activities

c. Excessive paperwork

d. Role conflicts, poorly defined objectives, sudden changes in personnel and rules, the need to consider constantly and deal with "politics," and other organizational issues.

29. Compared to other mental health treatments for PTSD. What percentage are you personally satisfied when finishing a treatment with a patient using ART?

Percent personal satisfaction following ART treatment completion

a. 0-25%

b. 26-50%

c. 51-75%

d. 76-100%

30. In your opinion, what Mental Health Burnout factors have you experienced with other PTSD treatments?

a. .Workplace climate

b. Caseload size

c. Severity of client symptoms

d. Emotional Exhaustion

e. Job not a good fit

f. Depersonalization of Clients

31. As a Mental Health provider how do you de-stress from your daily case load?

a. Seeing your own therapist

b. Maintaining daily habits

c. Cognitive Behavioral Techniques

d. Meditation

e. Self-Care

f. Exercising

g. Being with loved ones

h. Organizing your personal space

32. Please rank-order the following reasons for patients not completing their course of ART (from 1, the most common reason, to 7, the least common reason).

a. They improved to the point they did not need / desire additional sessions.

b. ART was only used to catalyze other therapies or to help the patient move past "stuck points".

c. The patient preferred a different type of psychotherapy.

d. The treatment setting did not permit me to provide a full course of ART (ED, inpatient, consults, etc.).

e. The patient stopped scheduling ART appointments

f. The patient moved, the provider moved, or we had some other logistical challenge

g. Other

Appendix B IRB Approval

USF
UNIVERSITY OF SOUTH FLORIDA

RESEARCH INTEGRITY AND COMPLIANCE
Institutional Review Boards, FWA No. 00001669
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813) 974-5638 • FAX (813) 974-7091

11/30/2018

Henry Burns, Jr.
Teaching and Learning
14352 Ponce De Leon Blvd.
Brooksville, FL 34601

RE: **Exempt Certification**
IRB#: Pro00036678
Title: Prevention of Mental Health Provider burn-out using Accelerated Resolution Therapy

Dear Mr. Burns:

On 11/30/2018, the Institutional Review Board (IRB) determined that your research meets criteria for exemption from the federal regulations as outlined by 45CFR46.101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

As the principal investigator for this study, it is your responsibility to ensure that this research is conducted as outlined in your application and consistent with the ethical principles outlined in the Belmont Report and with USF HRPP policies and procedures.

Please note, as per USF HRPP Policy, once the Exempt determination is made, the application is closed in ARC. Any proposed or anticipated changes to the study design that was previously declared exempt from IRB review must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant an amendment or new application.

Given the determination of exemption, this application is being closed in ARC. This does not limit your ability to conduct your research project.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

Melissa Sloan, PhD, Vice Chairperson
USF Institutional Review Board