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## The Gamification of Gambling: A Case Study of The Mobile Game *Final Fantasy Brave Exvius*

Gregory P. Perreault  
*Appalachian State University, gperreault@usf.edu*

Emory Daniel Jr.  
*Appalachian State University*

Samuel M. Tham  
*Colorado State University*

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# The gamification of gambling:

A case study of the mobile game *Final Fantasy Brave Exvius*

**Gregory P. Perreault**, Appalachian State University  
**Emory Stephen Daniel**, Appalachian State University  
**Samuel Tham**, Colorado State University

## Abstract

The present study seeks to understand the 'loot box' gamer--gamers who play games in which real money is spent in order to gamble for the chance at digital game content. Prior research has found loot box gaming associated with problematic gaming behaviors and gambling. This study seeks to understand the players themselves through a case study of players of the loot box game *Final Fantasy Brave Exvius*. Examined through the lens of Social Identity Theory and Social Comparison Theory, this study examines the phenomenon through two data sets: a survey of participants on the *Final Fantasy Brave Exvius* subreddit (n=592), and in-depth interviews with attendees at the games international convention (n=21). We find that the communal aspect of the game amplifies the structural orientation to encourage spending and that loot box gamers build their identity in relation to their spending habits and nostalgia for the *Final Fantasy* series.

**\*STUDY AVAILABLE OPEN ACCESS AT THE LINK BELOW**

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## Introduction

Online and mobile gaming generates billions of dollars in revenue every year. In the gaming market, free-to-start games have been particularly profitable for developers in ways that have “invited comparisons to electronic slot machines” (King & Delfabbro, 2019, p. 166). Some of these games appear to be “free” on the surface, but “the player is encouraged to spend money to make unimpeded progress in the game “(King & Delfabbro, 2019, p. 167).

This spending occurs through the purchase of what are called *loot boxes*. “Loot boxes are virtual items in video games that contain randomized contents but can be paid for with real-world money” (Zendle & Cairns, 2018, p. 1; Macey & Hamari, 2019). Prior research has established that there is a strong causal relationship between the purchasing of loot boxes and problematic gambling behaviors. It is worth noting that gaming industry representatives have strongly rebuffed this connection, but it is a connection that has been strongly supported in numerous studies (Zendle & Cairns, 2018; Macey & Hamari, 2019).

Perhaps no form of loot box purchasing is more problematic than in mobile gaming—it allows for *gambling on the go* where individuals have the access to a gambling forum continually in their pocket and that often will lure people with the low cost of an individual *roll*. Prior research has acknowledged that there’s much that is unknown in gaming practice—in particular about who plays these loot box games and what motivates their play (King & Delfabbro, 2019)

The present study seeks to explore the identity of the loot box gamer, how they perceive the spending practices in the game and how loot box gamers are motivated to spend real world money on virtual items. This was addressed through a case study of a mobile loot box game community. The present study draws on two samples—a survey of *Final Fantasy Brave Exvius* (FFBE) mobile gamers (n=595) and an in-depth ethnography with field interviews (n=21) from the game’s convention. Together, this data helps uncover the identity of the loot box gamer and sheds light on the spending practices at play in loot box gaming. This data will argue that this gambling is motivated by the players’ shared love of the *Final Fantasy* series and also the shared, real-time experience of loot box opening and result sharing; it allows for a sort of *keeping up with the Joneses* mentality where gamers are put into constant comparison of how loot boxes have enabled others to engage with the *Final Fantasy* game world.

### **Theoretical Framework-Social Identity Theory**

Social Identity Theory (SIT) suggests that individuals strive for a positive identity and make social comparisons with other group members (McKinley, Mastro, & Warber, 2014). SIT consists of two separate levels: personal identity and social identity (Tajfel & Turner, 1979). Personal identity refers to the identity associated with one’s sense of self; whereas social identity is related to the groups that the person belongs to (White, Argo, & Sengupta, 2012). The higher self-esteem a group has collectively, the stronger sense of defined identity they share, and the more positive emotions people create towards being a

group member (Gabbiandini, Mari, Volpato, & Monaci, 2014). Individuals crave to be a part of the overall group identity in part because of the associated positive emotions and self-esteem.

Jones (1991) included three elements that help define the social identity. These elements will be integral for how we situate the loot box gamer and used to help parse the discursive construction of their practice and identity. First, the Jones' (1991) SIT model includes individual factors, which consist of components like demographics of the group, or the development or success of the group. Second, SIT includes organizational factors such as a code of ethics and an organizational culture. Third, the in-group must contain a moral intensity. Moral intensity includes the course of action that a group must take when faced with ethical issues (Jones, 1991). Hence, being a "gamer" can become a salient aspect of an individual's social identity, much like being a fan of a sports team (Ellemers, Spears, & Doosje, 2002).

Strength of identification is also a concern to the gaming industry in terms of building a community of players (Daniel, Perreault & Blight, 2020; Perreault et al., 2016; Perreault, 2015)—this sort of identification is a key feature in what allows events like the *Final Fantasy Fan Festa* to occur. Identification strength refers to the extent of the self-definition, positive affect from the in-group, and how much a person feels the group is central to their identity (Cameron, 2004).

### **Theoretical Framework-Social Comparison Theory**

As loot box gamers evaluate their own identity and social identity, it is only natural for gamers to compare their developed personal identity relative to the broader community of loot box gamers. Social comparison theory is grounded on the idea that people's opinions and abilities intersect to affect their beliefs about their behaviors (Festinger, 1954).

Opinions and abilities are determined relative to other people, which means people use others as a referent (Goethals, 1986). This is especially apparent when individuals compare themselves to others they regard as similar (Festinger, 1954).

It is not uncommon for gamers to self-categorize themselves in relation to other gamers (Ellemers, Spears, & Doosje, 2002). Comparison comes in two forms: assessing individual performance relative to those perceivably doing better, which is an upward comparison. Conversely, individuals can also look at performance relative to those who are perceivably doing worse. Colwell, Grady, and Rhaiti (1981) argued that downward social comparison can lead to increases in self-esteem and self-perceptions of competence and skill. Whereas, upwards can reduce motivation and perceptions of competence and skill (Boggiano & Barrett, 1985). Gamers that engage in more *Final Fantasy* games will likely then be more competent with the loot box game in the series, with more motivation to communicate within the group.

### **Literature Review-Mobile Gaming and Loot boxes**

Prior research (Hamari, 2015; Macey & Hamari, 2019; Tham & Perreault, 2021; Zendle & Cairns, 2018, 2019) has indicated the degree to which the loot box gamer is associated with problematic gaming practices and tend to be the most susceptible to predatory purchasing practices. The mobile, loot box game *Final Fantasy Brave Exvius* examined in this study is a spin-off game from the *Final Fantasy* franchise developed for mobile devices, gamers on the go, and, perhaps, for gambling on the go. This has created a mass appeal towards gamers that have played the *Final Fantasy* series over the decades. As of December 2020, FFBE has amassed over 45 million downloads, and a daily revenue of \$900,000 (Sensor tower, 2020) --making it one of the most successful games on both the Apple and Google stores.

In a standard loot box mobile game, two types of currency exist: soft currency, which is given out freely, and hard currency, which is “purchased using real money” (Macey & Hamari, 2019, p. 23). Because of its rarity, the games typically allow gamers to exchange real money for the game's hard currency. The hard currency is used (1) to mitigate game-structured time constraints (e.g., a player can wait two hours to play again or pay hard currency to play again immediately) and (2) to gather rare resources (e.g. a player can either spend hours playing to gather such resources and potentially find themselves unable to complete certain time-constrained events or pay for at least a chance to gather these resources) (Koskinen, Paavilainen, & Hamari, 2016).



Indeed, Tham and Perreault (2021) demonstrates that even when mobile gamers were given the opportunity to acquire loot boxes through in-game advertising, players preferred to spend money—indicating that far from being an ancillary part of the game, loot boxes may be essential to the mobile games that include them. While game communities at times view the purchasing of loot boxes negatively (Macey & Hamari, 2019)—given that they would seemingly reduce the competitiveness of the gaming experience as all a player need to do to advance further is to spend more money—the mobile game’s public relations team largely gears the game toward those who spend money (Perreault & Perreault, 2020; Perreault, Perreault & McCarty, 2019).

King and Delfabbro (2019) argue that the unregulated nature of loot box gaming can be predatory toward gamers given that “it may difficult for some users to critically appraise the value of some in-game purchasing options and some vulnerable users may be financially and psychologically exploited by these schemes” (p. 175). King and Delfabbro (2019) describe the “predatory monetization” schemes in these games as arriving from an imbalance in information—the game system knows more about the player than the player can know about the game (p. 175-176). The reinforcement schedule of loot boxes results in purchasing habits, Li, Mills and Nower, (2019) argue, are often tied to further losses that fuel an increased desire to escape through play.

Hence, evidence points toward a significant link between problem gambling and loot box spending (Zendle & Carins (2019). Zendle and Cairns’ (2018) research showcased how the

elements of problematic gambling behavior “comes with an associated increase in loot box spending (p. 7). Hence “the more severe a gamer’s problem gambling, the more they spend on loot boxes” (p. 9). Prior research has also linked problem gambling with gaming addiction. Griffiths (2010) correctly notes that an activity cannot be *addicting* unless it has a negative effect, and certainly excessive spending would qualify as a negative effect.

Online gaming operates as a sort of self-medication (Han et al., 2009; Kuss & Griffiths, 2012) that suggests that as the addiction develops, gamers spend increasing amounts of time preparing for, organizing and actually gaming. In other words, it is possible that loot box games are geared less toward people with low impulse control and more toward facilitating a behavior addiction (Kuss & Griffiths, 2012).

### **Literature Review-Gamification of Spending**

Gamification has drawn significant criticism in that, while the intention is to integrate the gaming experiences into the fields ranging from business (Houtari & Hamari, 2012) to journalism (Vos & Perreault, 2020), gamification would seem to fail both the essential functions of a game as well as the goals of the “consultants who seek to ... exploit an opportunity for benefit” (Bogost, 2015, p. 65). The problem, of course, lies in determining what a *game* is (Deterding et al., 2011); hence there would seem to be numerous exceptions on Bogost’s (2015) argument depending on how a game is defined. Bogost (2015) describes gamification as ‘exploitation ware’ given that gamification is aimed as exploiting the expectations of audiences (p. 77) yet loot boxes gaming would seem to be an exception to Bogost’s (2015) critique, given that loot boxes gamifies gambling—in the

context of a broader game. In short, loot boxes are an exemplification of gamification. The mixture of gambling and video gaming outlines a fruitful avenue for gamification given that it represents what Delfabbro & King (2020) describe as a *digital convergence*. Such digital convergence would seemingly not only allow someone to go from the pleasure of gambling to taking in a story, but to enhance both.

Extant research indicates that gamification encourages user activity (Hamari, 2015; Vos & Perreault, 2020). For example, those exposed to badges in gaming were more likely to list goods for a trade in a service, and were more likely to complete transactions (Hamari, 2013). Yet it is important to note that the success of gamification is reliant on two factors – the role of the context being gamified and the nature of the users (Hamari, Koivisto & Sarsa, 2014).

Ultimately, Deterding et al. (2011) argues that while user activity is a valuable result of gamification, the goal is actually to gain user data; data that would help companies understand their users how to best enhance purchasing decisions (Perreault & Perreault, 2020).

### **Literature Review-Personal Identity**

This section situates this study on the loot box gamer within the concept of the personal identity, developed as the name suggests *apart* from the social community of loot box gaming as opposed to *within*. Beyer and Hannah (2002) questioned the nature of self and

why people change or fail to change as they enter new situations. In order to understand self and identity, they define three separate terms and discuss what needs to be considered when a newcomer enters a group: (1) self conceptualization is the root of identity and is “the mental representations of the self that people carry with them from one situation to another” (p. 637)—in short, a person’s attitudes, values, and beliefs can all be utilized to determine self, (2) individuals always come with different skill sets, backgrounds, and areas of expertise, therefore more than one conceptualization will be present—this makes the socialization process through identity that much more complicated, and (3) lastly, personal identity refers to the “encompassing idiosyncratic characteristics (e.g., bodily attributes, abilities, psychological traits, interests)” (p. 638).

For instance, the idea of joining a *Final Fantasy* fan group will sound enticing to many who enjoy the franchise, but each person will come into the group with differing degrees of knowledge about the series (Perreault, 2015). Beyer and Hannah (2002) argue that as new comers are socialized in a group, they nevertheless maintain their identity.

## **Methods**

### *Research Questions*

This literature leads us to pose the following research questions.

RQ 1: “How do gamers define loot box gaming?”

RQ 2: “How do gamers articulate their identity?”

RQ 3: “How do gamers make purchasing decisions regarding loot box use?”

### *Procedures and Participants*

This case study draws on two qualitative data sets to understand the issue of the gamer identity and gamer motivations in loot box gaming. The first data set comes from an online survey between February 12 and February 21, 2017 using Qualtrics. Respondents were recruited online from the subreddit of *Final Fantasy Brave Exvius* to complete the survey. A thread was created on the Reddit page to invite gamers from the games to complete the survey. Overall, there was a total of 595 participants from the United States that answered the survey. Of the 595 sampled, 90.6% were male, 9.4% female, and no responses indicated other categories. The median income category was \$50,000 to \$54,999 (see Table 1). The median age group of these gamers was 18-25, which accounted for 50.2% of the respondents (see Table 2). Among the respondents, 80.7% were single, and 18.7% were married (See Table 3). These demographics were in line with prior research on this topic which identifies the audience of loot box gaming as predominantly young and male (Macey & Hamari, 2019). The survey included both quantitatively oriented scale questions and qualitatively oriented open-ended questions, but for the purpose of this study and in order to address the research questions, we will be solely examining the data that emerged from the open-ended questions.

The second data set was derived from an ethnography of a gaming convention for *Final Fantasy Brave Exvius*—the *Final Fantasy* Fan Festa in 2018. This convention is a sensible place for such analysis in that *Final Fantasy* represents a content “hub” in gaming. During

the event, long-form field interviews were held with 21 participants. The average interview was about 45 minutes in length and during the interview, participants were asked about their identity as a gamer, what motivated their play, their spending habits, and how they collected information used to inform their spending. Once all the interviews were done, data imported to an excel spreadsheet with all responses downloaded onto a university password protected computer. All identifying information was removed and transcribed on individual excel documents. Data was analyzed in university offices. After the analysis process had concluded, the transcription remained on the secure computer until the study reached completion.

This two-step approach was employed in order to more comprehensively understand the nature and motivations of loot box spending. The questions used in the survey were used inform more detailed questions employed in the field interviews. Taken together, the survey and field interviews revealed several insights into the ways that gamers approach loot box decision making in video games. During the interview, participants were asked to discuss examples of loot boxes they have encountered in *Final Fantasy*, how they play the game, why they play the game, and their identity and involvement in the game.

### *Survey and Field Interview Questions*

The structure of the survey started with a series of quantitative measures that—aside from demographic questions—are not employed in the present study, but they helped set up a series of open-ended responses. Open-ended survey questions were designed to explore

both their motivations as well as their perception of their identity. After indicating their primary loot box game, respondents were asked to answer questions such as “what do you enjoy most about this game?,” “If you have spent money on the game, did you feel money was necessary to be successful? Why or why not?,” “If you have spent money on the game, were you satisfied with your purpose? Why or why not?” and “Is the monetization system (seen in in-app purchases) in this game fair? Why or why not?”

The field interviews built on these survey questions and posed questions to better get at player identity such as “Why does this game mean so much to you?” and “How do you play this game?;” the later question was then followed by a series of questions related to when they played the game and whether they played the game in tandem with other aspects of their lives. They were also asked more directly “Some research has indicated that mobile gaming is addictive, have you found it to be the case with this game? Why or why not?” and “Are there things you fear missing out on that motivate your play of this game? If so, what are they?” While the data was gathered in two steps, for the purpose of analysis, the data was analyzed a singular discursive corpus that spoke to the “socially situated” process—loot box gaming—that was explored here (Candin, 2014, p. ix).

### *Theoretical Underpinnings of the Methodology*

Discourse is “language in use” and is distilled from a social process (Candin, 2014, p. ix). Hence, discourse analysis seeks to understand language based on the contexts in which it is found e.g. social, institutional, cultural. The analysis aims to examine the ways in which

language is used to develop meaning through rhetorical strategy, word choice, and a focus on the process of legitimization—what actors and behaviors are legitimized and delegitimized (Hall, 1980; van Dijk, 1988). This research emerges from a social constructionist framework in which the research seeks to understand the world in which participants live (Creswell, 2007). Given that the goal of this study is to understand the nature of look box gaming, and to address the research questions, a qualitative approach is necessary; this allows the researcher to explore how participants “engage with their world and make sense of it based on their own historical and social perspectives...coming from interaction with the human community” (Creswell, 2008, p. 9).

### *Data Analysis*

Researchers evaluated the data in three levels, which involved: (1) Raw Data, (2) Descriptive Statements, and (3) Interpretation (Krueger, 1998). Raw data consists of reactions that were said by respondents. This information, categorized by themes in the topic, was used to determine consistency with moral decision making and interactive narratives. Second, using the raw data, descriptive statements summarized the respondents' comments and provided illustration using the raw data. The researchers made the judgment on which quotes to include, with those quotes acting as the representative for the descriptive statements. Lastly, interpretation built on the descriptive statements by providing meaning to the data rather than merely summarizing. The interpretation acted as the reasoning behind the descriptive statements. The analysis was conducted in reflection of the methodological structure of Yin (2011) to represent the



“views and perspectives of the participants in the study” (p. 7) as well as to contribute “insights into existing or emerging concepts that may help explain human behaviour” (p. 8).

### *Ethics Approval*

This data was gathered and collected following approval from the Appalachian State University Institutional Review Board (Approval #17-0184) as a part of a larger research project that also resulted in the work for Tham & Perreault (2021).

### *Results*

In regards to RQ 1, interview subjects largely took for granted the loot box itself, defining it in classic terminology rooted in their social identity. This included an emphasis on the loot box as a means of accessing resources, as a part of the strategy of play,

Respondents took a gaming lexicon for granted— terms like “powercreep” (Interview Participant 9), “min-maxers” (Interview Participant 19), “gacha rates” (Interview Participant 9), and “orb regeneration” (Interview Participant 17) were all used with little explanation. This speaks to a shared culture of the game in which such terminology can not only be used but understood. Hence, participants defined loot box gaming as (1) occurring within a shared community (2) requiring time and resource management both in the game and out of the game, and (3) emphasizing a need for frequent play of the game.

Resources became a pattern within the results—participants expressed gratification at the rewards obtained by means of the player’s and game’s currency. The character units in *Final Fantasy Brave Exvius* are typically not guaranteed by loot boxes—rather they use in-game currency or their own money to purchase a *chance* for the characters. Far from being an issue for gamers, this actually was an attractive element in that it made the acquisition of these characters all the sweeter in that it “feels good when you pull a rare [character] unit” (Interview Participant 13). The goal of acquiring these characters is “more of a chess game” in that—with limited resources in the game and an obvious incentive to avoid spending their own money—“players have to be methodical” in order to get the units they need to progress in the game (Interview Participant 7).

This need to use the resources wisely was discussed through references to their play and sleeping habits. In *Final Fantasy Brave Exvius*, the game only allows a certain amount of actions before a player is asked to refill it with in-game currency or real money. Gamers noted that they wanted to use their energy but “the game doesn't notify you like other games do so I will check in often at night to use it all up” (Interview Participant 2). Other participants discussed staying up until midnight—or later—in order to wait for the game to reset in order to get the daily gifts provided by the game. In some cases, they noted that their play of the game cut into the daily lives. One player noted that he tended to stay up late playing Saturday night, and he was fortunate to “not work Sundays” because the play would happen one way or another (Interview Participant 1).

The idea of a chess match became more challenging for players to follow when the developers made frequent changes, requiring new strategies. Gamers often referred the need for time and resource management in reference to “power creep”—the idea that as the game continually updates and introduces new content and challenges, it requires that gamers get new characters in order to be able to complete them (Interview Participant 9). In the case of *Final Fantasy Brave Exvius*, gamers described a backstop built in the loot box game to help encourage progress—as well as spending, in that gamers all share a “friend” unit with other gamers. This means that a player can “use” the best shared character for challenges in the game, yet this also provides a vivid opportunity for *keeping up with the Joneses* in that gamers are continually reminded of the characters and achievements of other gamers. This shared character is a point of pride for gamers, according to interview participant 9, and hence, a marker for one’s place within the broader loot box game community.

Finally, participants discussed incentives built into the game that were designed to encourage frequent play: energy (and the incentive to use it), daily gifts, and limited-time content. The energy, as discussed above, encourages gamers to play the game when their energy is restored since there is no way to store energy not used. The daily gifts, in a similar manner, expire if not received in game, and a player might miss out on future gifts if they haven’t received all the gifts within the time frame provided (typically, participants said, a gift or two each day). Finally, participants noted that there is gaming content—levels, activities, and characters—that only exist for a certain period of time. Given that it

is rare for events to be repeated, this means a substantial portion of the game is actually “limited” content that is especially attractive to gamers interested in completing everything in the game (Interview Participant 13).

Overall, as a group, the interview participants discussed their loot box gaming with the shared terminology and shared set of values that come from a community. Participants agree that this community was a vital aspect of a loot box game, as was time and resource management and the need for frequent play.

In regards to RQ2, shared meaning and values played an essential component for personal and social identity—these were reflected rhetorically in allusion to their value for the *Final Fantasy* franchise, memories, the community, and the time they had already devoted to the game.

As these theories suggest, the interest in *Final Fantasy* from the gamers’ perspective was rooted in their love for the franchise and community. Rather than expressing identity in mobile gaming, and their identity was founded in their love for *Final Fantasy*. One participant mentioned: “Maybe because its *Final Fantasy*. That's what got me attached is because of the *Final Fantasy* series” (Survey Participant 309) Another participant carried a similar sentiment: “I grew up playing *Final Fantasy*. A lot of games are the same thing. You've got to like *Final Fantasy*” (Survey Participant 78). In addition to personal identity of the game, the nostalgia of the franchise also contributed to their identity:

For me, it's about the nostalgia for playing the other *Final Fantasy* games from when I was younger. It's nice to see your progress. Building a character, building a team then putting it to the test. Beating a challenge is very satisfying (Interview Participant 2).

The implication from Interview Participant 2 is that fans express their personal identity in relation to fond memories they have experienced in the *Final Fantasy* franchise. To them, this is another enjoyable experience in an already well-established game series.

Participants connected with their childhood in experiences they loved in the past. "The nostalgia factor is big. My friend told me 'You've got to play this game.' It's a continuation of my childhood. They didn't give all the content at once so that keeps me involved" (Interview Participant 2). Shared nostalgia influencing identification also might explain areas of social identity and involvement of the game.

While some people were influenced by friends to play the game, others just enjoyed the fact there was a community of likeminded individuals to play with. One survey participant expressed their interest was, "The community. I like linking up to the other gamers. Nerds just like other nerds" (Survey Participant 131). Participants expressed an emergent interest outside of the franchise, but rather a social identity of belonging. One participant "went to someone's wedding through friendships I made in this game" (Interview Participant 17) and others argued that it is "cool to have a chance to talk to people about a game you enjoy playing. It gives you a chance to get to know other people" (Interview Participant

20). In both cases, *Final Fantasy* was not necessarily the driving force for identity, but rather a means to find something to engage in, and finding a community they could enjoy. Social identity formed around the specific game in this case, rather than the franchise or mobile gaming.

Participants often expressed how much time they put into the game—time and energy devoted to an activity is one of the central themes of social identity theory. While participants were active members of their community or the franchise, largely participants expressed a segmented identity. In other words, they structured their play around the things they needed to accomplish each day (e.g. work). Interview participant 3 expressed: “In the morning I’ll turn on a TV show and will play the game while watching. During breaks from work I’ll play some more. Then when I get home I really play--that’s when I do the hard content.” Similarly, interview participant 15 mentioned that play was foundational in the morning and at work breaks with colleagues. However, it was not to interfere with their life outside the game, as interview participant 4 expressed: “I play when I have down time, like when I’m waiting line, trying to kill time. I wouldn’t let it interrupt my daily schedule.” Most participants use this as a chance to play during a downtime. Whether it is unwinding from work, a lunch break at their job, before bed, etc. Members do find times to play, but it is often between activities.

All of these variables play a significant contributing role regarding these purchasing decisions. In regards to RQ 3, participants in both the survey and the field interviews at

the *Final Fantasy Brave Exvius* convention reported that their purchasing decisions were primarily motivated by the games community, by impulses trained through the nature of the game's reward system, and through a desire to cut down on the time expectations of the game.

In the survey and the interviews, participants all indicated the power of their distinctive social media and message board communities. They spoke in glowing terms about the upcoming content information they gained from Reddit, the tactics displayed on YouTube and the strategies they gained from GameFAQs. But a natural part of this community is an awareness of what content other gamers have—participants noted that, depending on the game, they suddenly can gather an awareness of what items and characters their fellow gamers are using. This is exacerbated by the way such communities work in that they tend to have an “answer person” who operates in a “privileged role in the community” in which a user's “dominant behavior is to respond to questions posed by other users” (Buntain & Golbeck, 2014, p. 1).

Thus, if the answer person for your community indicates that a particular level requires a particular item or character, this then encourages gamers to consider using their in-game currency and then real money in order to get the item or character if they want to complete it.

Interview participant 2 argues that to beat challenges gamers may need to “cash out a little,” and “social media contributes” to that spending. Yet few participants argued that they had been explicitly encouraged to spend real money in their community—rather they felt it implicitly as a sort of community pressure.

The games themselves do encourage player spending. One survey respondent put it “the game is generous and entirely playable daily without [spending money]” (Survey Participant 257)—yet this generosity, in the forms of daily gifts, is designed to encourage gamers to always feel like they’re always receiving something. Thus when the player does not receive anything, it seems reasonable to go get something using their in-game currency, and when that fails, their own money.

Finally, and as noted in regards to RQ 1, these games provide a high amount of content and much of it is *limited* content that requires gamers to play it in a timely manner. Yet in the survey the mean age group of these gamers (N=595) was 18-25, which accounted for 49.7% of the respondents. In short, these are respondents who are beginning their working careers or perhaps in college/trade school. This means that if a player wants to be able to complete all content there may be times when they feel stretched between the expectations of their life and what they want to accomplish in their game. This makes the ability to spend money on refilling all the more attractive—this allows gamers to complete the content on their time table, as opposed to the game’s time table.



In short, participants in both the survey and the interviews had motivations for their spending both within their own game community, within the game itself and within themselves in order to accomplish what they wanted in the time they had available.

### *Discussion*

Gamers regard that loot box is central to the game, such that without engaging in loot boxes, they will not be adequately equipped to enjoy the features of the game; which would naturally make the game addicting (Li, Mills & Nower, 2019; Zendle & Cairns, 2018, 2019). However, part of the positive gaming experience is not only just beating the game's content, but also the satisfaction of acquiring rare character units within the game. Thus, this leads to a duality of beating challenges within a game but also completing a collection. Thus, gamers are incentivized to play daily, to acquire substantial resources within the game to work toward the loot box. However, they know that even the acquisition of the rarest of units through loot boxing is temporary, as the term "power creep" implies that over a period of time, the newest unit will take over that mantle. Thus, gamers create online communities to help inform them to make the best decisions.

The identity of the gamers is rooted in their love for nostalgia in the *Final Fantasy* series. Therefore, finding other gamers that also love the *Final Fantasy* series creates a social identity of belonging for the gamers. The strong nostalgia towards the game and the community, may have perhaps dictated how they structure their daily lives in completing routine tasks, to stay current within the game, and thus feel that they maintain the

membership within the group. These communities certainly add to the enjoyment of the game, but also provide an additional avenue for gamifying the gambling of the game. The excitement of acquiring a rare unit isn't just in acquiring it, or in the graphical celebration on the screen, but also in the ability to share the unit with the rest of the community. While certainly gambling relies heavily on chance, the structure of the game and the game community at times makes it feel a bit more like a competition.

For loot box purchases, the gamers provided information about how they have become more savvy in their purchasing decisions of loot boxes. Because of the social nature of the game, they typically follow the lead of community leaders to go all-out for more socially sought-after units in order to stay current in the game by beating the challenges. Because the mechanics of the game encourage spending, there is an incessant desire to keep up in order to not lag behind when comparing themselves to others within the community.

The overall implications of the research are multi-fold. First, we see how loot boxes have shaped the overall structure of game and the game community (Deterding et al., 2011). We find that loot box games, provide a duality in challenge of beating content and also inducing a desire for collection in order to experience "completeness" in a game. Thus, for gamers that strive to finish their collection, it may create a problematic-gaming desire to complete their collection, by engaging in loot box purchases until they have gotten what they need. Second, we are able to see deeper into how the gamers view themselves in such games. We find that nostalgia is often a factor for gamers starting *Final Fantasy*

*Brave Exvius*. While personal nostalgia may be the initial driving force to play the game, meeting other gamers who also love the *Final Fantasy* series has created collective nostalgia through participation and membership of online communities (Tham & Perreault, 2021; Perreault & Perreault, 2020). Collective nostalgia not only can have an impact on personal and social identity, but it can also magnify behavioral and purchasing intentions (Wildshut et al., 2014; Sierra & McQuitty, 2014). The link with personal identity with the series and the nostalgia formed with positive emotions, creates an easier transition for not only purchasing patterns, but common social identity with other players (McKinley, Mastro, & Warber, 2014). Thus, gamers find ways to increase their standing in the collective through increased participation and expenditure. In this case, gamers may choose to spend more in the game to maintain their status within the social group.

Third, we find the social identity of these gamers have led to an inadvertent hierarchy where opinion leaders in online gaming forums help shape the expenditure within the game. As previously stated, opinion leaders will come in with an array of past experiences and accomplishments that announce their own personal identity to the social collective group. To match these accomplishments, gamers will spend money to acquire the exemplar units that opinion leader used. Moreover, the willingness to spend extended time in the game and purchasing available resources (e.g. skins, weapons) that could help the party might also increase the chance for greater social identity. Gamers are well versed enough to know that it may be unwise to spend on every promotion. Hence they work not

only individually but as a community to strategically assess these promotions and determine when to spend.

These findings offer profound insights as to reasons as to how and why gamers become involved in loot box gaming, contributing to the larger issue of problematic gaming as outlined in previous research (Zendle & Cairns, 2018; Macey & Hamari, 2019). Tham & Perreault (2021) argue “it may be that video gaming is simply vehicle in which such gambling practices can prey upon the vulnerable” (p. 16), and indeed, the gamification of the process seems to only enhance the loot box experience, perhaps making it the experience of games such as *Final Fantasy: Brave Exvius*.

Every piece of research has limitations and this study has a few. First, it is worth noting that as a piece of qualitative research, the researchers are considered a part of the research instrument and hence, inextricably tied to the research process. The goal of such research is not to replicate or generalize the data, nor could it be done. Nevertheless, through Yin’s (2011) guidance, this study instead focused on “transparency, methodic-ness and adherence to evidence,” (p. 19) in order to make it clear how this research was conducted. Second, given the difficulty in getting multiple gamers in a single location to conduct interviews, this research acknowledges that the participants in the field interviews are perhaps more advanced gamers within the game and may not be entirely representative of the casual gamer. Future research would benefit from an analysis of a wider variety of loot box gamers.

### *Conclusion*

Gamers shared harrowing tales of money lost in the data collected for this study. Through a depth analysis of the case of loot box mobile *Final Fantasy Brave Exvius*, this study sought to explore the identity of the loot box gamer, how they perceive the spending practices in the mobile game, and how the loot box gamers end up motivated to spend their money on virtual items. This was done through a two-step methodology: a survey of *Final Fantasy Brave Exvius* mobile gamers (n=595) and an in-depth ethnography with field interviews (n=21) from the game's convention. We argue that this gambling is motivated by the players' identity—tied to their love of the world of the *Final Fantasy* series—and, furthermore, we argue that they perceive the nature of the game as gamified gambling. Players are in a constant state of comparison, given that the game showcases the—admittedly rare—successes of others and this encourages them to spend so they can be as engaged with the game as their neighbors. Such loot box systems increasingly appear to be the future of mobile gaming (Sensor tower, 2020; Macey & Hamari, 2019) and it's a system that seems to come at the expense of its most invested players.

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## Appendix

**Table 1. Income Level of Participants**

Income Level	# of participants	Percentage	Total Percent
Less than \$5,000	28	6.6	6.6
\$5,000-\$9,999	16	3.8	10.4
\$10,000-\$14,999	15	3.5	13.9
\$15,000-\$19,999	10	2.4	16.3
\$20,000-\$24,999	22	5.2	21.5
\$25,000-\$29,999	16	3.8	25.2
\$30,000-\$34,999	27	6.4	31.6
\$35,000-\$39,999	23	5.4	37.0
\$40,000-\$44,999	23	5.4	42.5
\$45,000-\$49,999	12	2.8	45.3
\$50,000-\$54,999	20	4.7	50.0
\$55,000-\$59,999	20	4.7	54.7
\$60,000-\$64,999	13	3.1	57.8
\$65,000-\$69,999	7	1.7	59.4
\$70,000-\$74,999	21	5.0	64.4
\$75,000-\$79,999	16	3.8	68.2
\$80,000-\$89,999	10	2.4	70.5
\$90,000-\$99,999	18	4.2	74.8
\$100,000-\$124,999	42	9.9	84.7
\$125,000-\$149,999	18	4.2	88.9
\$150,000-\$199,999	20	4.7	93.6
\$200,000-\$249,999	12	2.8	96.5
\$250,000 or more	15	3.5	100.0
Total Completed	424		
Missing	171		

**Table 2. Age of Participants**

Income Level	# of participants	Percentage	Total Percent
Under 18	39	6.6	6.6
18-25	296	50.2	56.8
26-30	123	20.8	77.6
31-40	125	21.2	98.8
41-50	5	.8	99.7
51-60	1	.2	99.8
80+	1	.2	100.0

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Total	590
Missing	5

**Table 3. Marital status of participants**

Status	# of participants	Percentage	Total Percent
Married	111	18.7	18.7
Single	480	80.7	100
Total	590		
Missing	4		