THESIS

HAPPINESS IN GIELINOR: MODELLING SOCIAL PLAY AND WELL-BEING IN ONLINE THIRD PLACES

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ABSTRACT

HAPPINESS IN GIELINOR: MODELLING SOCIAL PLAY AND WELL-BEING IN ONLINE THIRD PLACES

As the world slowed during the Covid-19 pandemic in 2020, many remained in their homes and avoided social contact outside of performing essential activities. In lieu of everyday social connections with friends and family, people turned to online worlds to satisfy basic needs like that for social belonging. Internet-based social interactions allowed for the expansion of many online social spaces, particularly those facilitating leisure activities (such as online video games) and social connection (social media outlets, messaging applications, etc.). To examine the effects of a pandemic-related "online social migration," ethnographic fieldwork and psychological anthropological interviews (including free list and pile sort elicitations) were conducted within the world of Gielinor, home to the players of the MMORPG (massively multiplayer online role-playing game) Old School Runescape, with a focus on how players interacted with others and the impact of the game environment's normative "culture" (in the sense of socially learned understandings about the proper and best way to enjoy this game). By inhabiting this competitive, supportive, and encouraging virtual world environment, players placed significant value on their in-game social connections, and these relationships were found to be crucial not only within the game world but also in players' real-world lives. Further, this game environment allowed for gamers to foster a sense of well-being and happiness in the absence of real-world third places (such as bars and coffeehouses) and in-person social interactions, suggesting the emerging importance during this health crisis of *online* third places.

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CHAPTER 1: INTRODUCTION

Video games provide their players with many benefits, both within the games and in players' real lives (Granic, Lobel & Engels 2014, Greitemeyer and Mügge 2014, Kowal et al. 2021, Snodgrass et al. 2021). These benefits include mitigation of mental distress (some relief from anxiety and depression), practicing and thus learning to deal with failure in healthier ways, and experiencing higher degrees of perceived mental well-being. Over time, gamers acquire mental and physical skills that allow them to more easily navigate their actual world lives. This study seeks to investigate the role that social gaming plays in the management of gamers' mental well-being, and how their experiences in-game translate to their lives outside of gaming contexts.

The 2020 Covid Pandemic was a significant inspiration leading me to investigate the relationship between online social connection and gamers' well-being. Widespread government-issued stay-at-home orders were initiated, which led to social isolation, particularly for marginalized and at-risk social groups such as those living in poverty, indigenous families, and persons with disabilities (UN Dept. of Economic and Social Affairs, 2020). In the absence of in-person social interaction, many "migrated" online to satisfy their need for social belonging during the height of the Covid-19 pandemic. Social media platforms and online video games saw a large uptick in their daily concurrent active users, as people started investing more in online environments. Old School Runescape (OSRS, or sometimes "Runescape"), the largest free-to-play massively-multiplayer online (MMO) game (a game where many players are simultaneously online with one another in the same game world) and the focus of this thesis, saw their concurrent player base (the average amount of online players at any given time) increase by almost 50% during March of 2020 (Yang 2020). As of November 2020, the concurrent player base had more than doubled from February of the same year. Jagex, the developers of OSRS,

issued a statement in April of 2020 that they were partnering with mental health awareness initiatives in an effort to combat the recent effects of social isolation, naming the campaign "Play Apart, Together." Discord and Twitch, popular online social spaces for communication and live-streaming, i.e., the broadcasting of video-game play over the internet, also experienced a significant increase in their daily users, gaining attention through quarantine as what are now considered to be "more mainstream communication platforms" (Jhee 2020). Twitch, arguably the internet's largest and most well-known site for live-streaming, experienced a roughly 50% increase in hours-watched between March and April of 2020, as well as an overall viewership increase of 24% in the previous month, which equated to the second largest monthly growth in the site's history (Stephen 2020). More users than ever were on OSRS, Twitch, and Discord, seemingly over the course of two months in 2020, one of the primary factors leading us to this investigation.

Social media, video games, and online communication in general became significantly more important in the time of Covid-19, and these particular platforms provided a social outlet that could "substitute the real-life interaction that we all miss" (Jhee 2020). In light of the proliferation of their usage, I chose to investigate these platforms as avenues for social connection, with particular focus on OSRS and its players. Discord and Twitch are primarily utilized by the OSRS community as social meeting grounds, uniting players under friend groups commonly referred to as "clans." Inspired by the "Play Apart, Together" campaign created by Jagex, I also decided to focus on how the expansion of online social communication plays a role in the construction of mental well-being for Runescape players, and how players' collective cognitive conception of "social play" bolsters or hinders their ability to remain happy and thriving in their lives (throughout this paper, the concept of *social gaming* is explored through

the cognitive model of "social play"). For the purposes of this project, psychologist Martin Seligman's (2011) PERMA model - i.e., Positive Emotion, Engagement, Relationships, Meaning, and Accomplishments - of well-being was used a benchmark for understanding how the cognitive model of "social play" interacts with the well-being of OSRS players (the PERMA model will be more thoroughly explained later in my thesis).

This project utilizes the methods and theoretical approaches of psychological and cognitive anthropology, with a focus on systematically and iteratively creating a cognitive model of "social play" that resides in the communities and minds of OSRS players. By this, I mean that methodologically this project follows in the footsteps of *Systematic Methods for Analyzing Culture*, a cognitive anthropological methods book to which my advisor Dr. Snodgrass and myself contributed (Dengah et al. 2020). In order to identify this cognitive model, ethnographic interview-based techniques like free lists (to be explained later) were utilized to obtain the *content* of this cultural cognitive model, with a subsequent survey and pile-sort techniques (which will also be explained) being used to determine the *structure* within the model. In the initial research stages of the project, ethnographic study of OSRS players in-game, on Twitch, and on Discord (an online messaging application with many options for customization) allowed me to begin to see how these individuals interacted socially online, and which aspects of the cognitive content were worthy of investigation. Semi-structured interviews asking players to reflect on their gaming during the ongoing pandemic were conducted subsequently between February and July of 2022, which allowed me to further define the content of the "social play" cognitive model, with participants completing short cognitive exercises (like free lists) to provide basic pertinent cultural information. Analysis of these interviews and their free lists resulted in a minimally organized collection of information that would then be clarified in the subsequent

research stage (pile sorts with explanation), allowing me to more fully identify the shared cognitive model of social play in OSRS. A "grounded-theory" methodology was also employed by our research team in Snodgrass et al. (2020), which allowed me to iteratively construct a cognitive model of resilience within gamers. A more thorough explanation of the methodological approaches utilized in this project will be included in the following chapters.

Previous research on the health and well-being effects of video game platforms suggests both positive and negative relationships on gaming and health (e.g., see Jones et al. 2014, Snodgrass et al. 2020, Snodgrass et al. 2019, Snodgrass et al. 2018). For example, Internet Gaming Disorder (IGD), is construed as a condition where gamers begin to experience prominent negative consequences, akin to other addiction-based disorders, in light of excessive, repeated use of video game platforms, a phenomenon also referred to by scholars as "problem gaming" (Ko 2014; Snodgrass et al. 2014). The social and competitive engagement in these cases can lead players to lose control over the time dedicated to online life, resulting in the inability to meet important responsibilities in offline life. On the other hand, more positive internet-gaming experiences can lead to healthier habits in the lives of gamers, suggesting that positive experiences online allow for gamers to have a healthier conception of online-offline balance and a higher degree of self-reported well-being (Snodgrass et al. 2018). These online experiences also have the potential to "inculcate resilience" by providing gamers with a largely constructive way to experience failure with fewer actual consequences, allowing them to more easily navigate failing in the real world with healthier habits (Snodgrass et al. 2020). Overall, this project seeks to expand on the relationship between online play and mental well-being, focused particularly on expanding our knowledge of the role that social play assumes within the relationship. Previous

research has not adequately investigated the role of social play within this relationship, and this project seeks to fill-in that gap of knowledge.

Particularly during the Covid-19 pandemic, I will argue that online social platforms provided a proximal social atmosphere that allowed gamers to satisfy their need for social belonging, ultimately resulting in a positive effect on gamers' mental well-being. As the pandemic has become more controlled from a public health standpoint, gamers have maintained their strong ties to an online social connectivity, allowing them to inculcate a similar resilience (see Snodgrass et al. 2020) to hardships in the real world through meaningful social connection.

CHAPTER 2: BACKGROUND THEORY: GAMING, WELL-BEING, AND PSYCHOLOGICAL ANTHROPOLOGY

2.1. Gaming and Streaming: Runescape, Discord, and Twitch

2.1.1. Runescape

The virtual worlds that are the focus of this project have each been the subject of academic study. Crowe and Bradford (2006) conducted a three-year study within the early days of Runescape that demonstrated the status of the online space as inherently leisurely and social, reminiscent of the work of Steinkuehler and Williams (2006), who likewise described online social spaces as veritable third places. Through in-game ethnographic study and interviews with players, Crowe and Bradford (2006) showed that Runescape and other online social spaces (*virtual)* were conceptualized similarly to actual-world social spaces. Runescape and online communities had become "cool places" for young people to hang out and functioned similarly to their real-world counterparts.

> MMORPGs offer realized and complete worlds which borrow from, but also extend, the material. These are virtual play-spaces, social and fantasy arenas not dissimilar to material play spaces. (Crowe and Bradford 2006)

Robe (2018) conducted an ethnographic investigation in the world of Runescape for their MA thesis and explored the concept of self-construction within the virtual environment. Players were found to construct their virtual selves in a variety of ways: through the accumulation of wealth, the physical and material development of their in-game characters, and through accomplishing many of the games hefty goals (quests, achievement diaries, etc.). According to Robe (2018), the social aspect of the game provided an environment for a more-developed construction of virtual social "selves", enhancing the overall experience for many players.

Bilir (2009) conducted a case-study within Runescape examining the similarities and differences between real-world and virtual economies. Runescape's macro economy functions on a system not dissimilar to a stock exchange and is referred to as the "Grand Exchange." Players can buy and sell mass quantities of items without having to trade with other players in-person, allowing for the constant trade of nearly every item in the game. This economy is player driven, largely governed by supply and demand, as well as by the importance or usefulness of the items being traded. Bilir (2009) makes the argument that the virtual economy within Runescape approximates and "partially reflects" real world economics, and that these virtual economies can be adequately used to study real-world economic theory and phenomena. Bilir (2009) also makes note on how the world of Runescape was understudied at the time, which I would argue is still the case today. Much of the current literature surrounding the game is concerned with identity and the construction and representation of the self within this virtual world, rather than its social environment per se. A primary goal of this project is to fill in the gap of information regarding the role of social gaming in Runescape, a game that has been demonstrated to provide a veritable environment for developing meaningful and beneficial social capital.[1]

2.1.2. Twitch

Twitch has become a locus of study since the rapid growth and development of live-streaming, or the public, performative broadcasting of one's gaming endeavors. The site provides a location for individuals ("streamers") to actively broadcast their chosen activity to a live audience and became popularized for its emphasis on video game communities. The Covid pandemic introduced new categories to Twitch, and while it is still overwhelmingly used as a video game streaming platform, other forms of content are becoming more prominent on the site.

[1] As defined by Bourdieu (1985): "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition."

Taylor (2018) explains in their book on Twitch that the site allows players to "transform their private play into public entertainment," providing a platform for both competitive and non-competitive gamers to build an audience and community, as well as to monetize their social and physical skills. According to an ethnographic study conducted by Johnson and Woodcock (2017), Twitch has also had noticeable effects on the video game industry, becoming a major marketing force that drives sales and popularity of new games. According to the authors, Twitch is "reshaping games reviewing, offering a viable alternative with significant advantages over the existing paradigms" (Johnson and Woodcock 2017). The platform has proliferated to become a driving force for video games as a whole.

de Wit, van Der Kraan, and Theeuwes (2020) state that live-streaming platforms have become an integral part of game culture, and this is especially the case when seeing a younger demographic transition to more frequent socialization online. Analysis of survey data indicated that Twitch helped many users cope with difficult times in their lives, by principally providing entertainment, distraction, and a sense of community (Wit, van Der Kraan, and Theeuwes 2020). The study also found that higher levels of stream engagement were correlated with increased difficulty in one's life, with troubled users spending more time actively participating in a stream rather than having it on in the background.

2.1.3. Discord

Recent studies have focused on the utility of Discord as a platform for communication within an educational environment, largely inspired by the Covid-19 pandemic and the widespread implementation of remote-learning initiatives (Cacho 2020; Schwartz 2021; Arifianto and Izzudin 2021; Bellefeuille and McCoy 2021). However, the platform was initially created as a VoIP chat service for people playing games together online, and "brands itself as

being built by people with a love for video games" (Anderson 2019). The platform provides users with a meeting-grounds where they can build and maintain a community of like-minded gamers, integrating chat channels, picture sharing, voice and video calls, and entertainment within the same location. A noteworthy study on Discord is that of Gheț̆au (2021), in which the researcher collected data from over 100 video game enthusiasts on the relationship between voice communication and perceived anonymity online. More frequent voice chat users on Discord were found to have a lower degree of perceived anonymity, and Gheț̆au (2021) suggests that perhaps those who participate in voice chat are more readily willing to share personal information than those who don't. Through the current ethnographic investigation of OSRS, I also found that more prominent and established members of communities were more often in these voice channels or streaming, and more peripheral members tended to respond in text chat channels. The focus of this project is primarily on Discord as a communication tool and extension of an already established social environment, "clans," "guilds," or simply friend groups in the case of MMORPG gamers.

2.2. Well-Being

2.2.1. Anthropological and Psychological Approaches to Well-Being

Scheper-Hughes (1995) calls for "the primacy of the ethical" from anthropologists, suggesting that the discipline should be driven by moral and political engagement, and "engage directly with questions of ethics and power." (p. 410). This notion was adopted by Mathews and Izquierdo (2009) to introduce the anthropology of well-being and happiness as studying the phenomenon in an explicit effort to make the world a better place. As the two describe it, the focus of such research is to provide sociocultural context into how people in different societies feel about their lives (Mathews and Izquierdo 2009). A major problem with the discipline, the

two note, is that differing frameworks for examining well-being result in myopic and isolated representations of cultural understanding. However, they emphasize the usefulness of these investigations, through rigorous ethnographic study, to provide a fine-grained understanding of well-being that is *emic* in nature - that is, from a cultural insider point of view - which would ultimately allow for cross-cultural comparisons of well-being (Matthews & Izquierdo 2009). An important goal of the current project is to provide a framework for well-being comparison within the sub-discipline from the perspective of online MMORPG gamers.

One influential framework for well-being was articulated by Seligman (2011, 2018), in which he described a five-part model for measuring well-being, abbreviated by the acronym PERMA. The model states that Positive emotion, Engagement, Relationships, Meaning, and Accomplishment are the primary elements of well-being, each being quantifiable through psychometrics to determine an individual's satisfaction of life. In a later discussion based on review of his work, Seligman (2018) suggests that subjective well-being (SWB) might also constitute the "final common path" of the elements of PERMA, emphasizing the 0.98 correlation demonstrated by Goodman et al. (2017) between SWB and profiled PERMA data. In plain English, how happy someone feels in their life can be a strong predictor and approximation for their well-being overall, and both models demonstrate equal efficacy in determining an individual's well-being. This idea was reinforced by Layard (2006), proposing a theory that well-being simply amounts to happiness.

According to Seligman (2018), the study of well-being, and a concerted effort to define the term, is still in its infancy. Goodman et al.'s (2017) inter-correlation of self-report measures provides additional structure toward a more ubiquitous model of well-being and allows for comparison with new models as they are introduced. Seligman (2018) argues that measuring

objective indices in both longitudinal and synchronous (or cross-sectional) studies will help illuminate the most applicable elements necessary in a broader theory of well-being. For the purposes of this project, Seligman's (2011) PERMA model was utilized as a benchmark for measuring the well-being of gamers within OSRS, with particular focus on the degree to which default value nodes of the social play model connect with elements of well-being and happiness. Many aspects of the PERMA model were revealed to be important in initial ethnography and interviews, and Likert-scale questions were subsequently created to investigate their importance within the cultural cognitive "model" of social play.

2.2.2. Virtual Worlds, Social Gaming, and Well-Being

Research has examined the connection between social behavior and online play, noting the benefits of participating within online social spaces (Kowert, Domahidi, and Quandt 2014; Oldenburg 1999; Steinkuehler and Williams 2006; Heng, Zhao, & Wang 2021). One study conducted by Kowert, Domahidi and Quandt investigated the relationship between "socially-inhibited individuals" (lonely, depressed, socially anxious, etc.) and the perceived safety of online communities, suggesting that shy people may benefit from forming social networks online. The benefit largely stems from these spaces allowing people to overcome in a safe space their in-person social difficulties (e.g., social anxiety). According to this study, "online games provide a shared, playful activity… [which] helps to facilitate the development and maintenance of social relationships" (Kowert, Domahidi, and Quandt 2014). Players are driven to communicate in a less-forced manner, intertwining social activity with the shared experience and easing the social pressure of talking to someone unfamiliar. Other studies have also confirmed a link between shy individuals and increased video game use, which may be partially explained by the work of Kowert, Domahidi, and Quandt. (Liu and Peng 2009, 2010; Chak and Leung 2004).

For certain socially disadvantaged individuals, online social spaces may provide a low-stress environment to develop skills and practice for the real-world, reminiscent of Snodgrass et al.'s (2020) investigation on how gaming can inculcate resilience.

In Oldenburg's (1999) book *The Great Good Place*, he makes the argument that social "third places," which are outside the realms of home and work, provide a venue for people to gather and hang out simply for the sake of good company and conversation. Places such as bars, cafes, bookstores, salons, and bistros, among many others, form the "heart of a community's social vitality" and represent hedonic or emotionally pleasurable pursuits. Steinkuehler and Williams (2006) expand on this idea to include online virtual spaces within as "third places," with their aptly named article, *Where Everybody Knows Your (Screen) Name*, referencing the song that plays in the intro credits of the classic sitcom *Cheers.* Similar to a local Boston bar with its regulars and frequent customers, online social spaces also provide a venue for informal sociability and possess the potential for the production of social capital (Steinkuehler and Williams 2006). The article suggests that MMO style video games, of which OSRS is one of the most ubiquitous, share many characteristics with offline "third places," and are embodied by an environment of frivolity, word play, and wit. The playful, informal nature of MMO-style video games allows gamers to more easily develop social relationships, albeit in a much less meaningful and deep way than friendships gained offline (Steinkuehler and Williams 2006). In light of the changing social atmosphere online, particularly following the Covid-19 pandemic, I hypothesize that online social spaces may begin to constitute a more serious avenue for creating social capital and provide participants with a proxy to satisfy their sense of social belonging. More simply, online social spaces may become an increasingly more important way for us to feel socially connected, and socially oriented video games may provide a preferable or advantageous

outlet for that connection, particularly in the case of socially inhibited individuals (Kowert, Domahidi, and Quandt 2014).

Heng, Zhao, and Wang (2021) conducted a study of 457 Chinese MMO gamers to investigate the relationship between in-game social interaction and gaming disorder, focusing on the mediating role of online social capital and the moderating role of alienation. Gaming disorder is recognized in the updated 5th Edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) as an emergent mental health issue worthy of study and is characterized by excessive online play resulting in addiction-like symptoms and negative outcomes on physical and psychological health. Their notion of alienation, which refers to one's perceived lack of connection to friends, family, and peers, is used remarkably similarly to Dressler's (2018) *cultural consonance* and *lifestyle incongruity* framework, to be explained shortly, and was determined to be a positive predictor of one's level of gaming disorder. The authors cite the primary socialization theory developed by Oetting, Deffenbacher, and Donnermeyer (1998), which states that socially ostracized individuals would turn to alternative environments in order to adequately seek affection, friendship, and social support. In this case, a gamer's degree of alienation from their prosocial contacts may result in them turning to online social spaces for some semblance of social capital, supporting my hypothesis that deeper social meaning can be found online, especially in times of isolation like the Covid-19 pandemic. On the other hand, this quest for social belonging may result in a higher degree of gaming disorder being displayed, which could begin to negatively impact a gamer's responsibilities and well-being if left unchecked.

2.3. Psychological Anthropology and Cultural-Cognitive Models

2.3.1. Cultural Models

This project utilizes a "cultural models" approach based on the work of D'Andrade (1995) and Bennardo & de Munck (2014), wherein shared mental representations of a concept (in this case, *social play*) structure the thinking and practice of individuals inhabiting social groups and are formed by socially learned "frames" of meaning (Lakoff 2002, 2004; Dengah et al. 2020). These shared understandings of the world, according to these theorists, result in the appearance of mutually intelligible interactions appropriate for the field of study (D'Andrade 2006; Bennardo & de Munck 2019). Elicitation techniques such as free listing and pile sorting (explored further on in this section) can be used to create and analyze datasets through *cultural consensus analysis*, providing researchers with a sense of the degree to which cultural models are shared amongst a particular group (Romney, Weller, & Batchelder 1986). A similar technique, *cultural consonance*, can be utilized to understand which individuals within a dataset most closely embody their own culture, and how that translates into individual thinking and practice (Dengah et al. 2020). *Cultural consonance* plays a particularly important role in this project, as its analysis allows us to better understand the effects of culturally influenced processes on gamers' behaviors and health. Ultimately, this cognitive anthropological approach allows for a greater understanding of how shared representations of the world translate into thought and behavior, and specifically, how cultural "webs of significance" (Geertz 1973) play a role in the maintenance of mental well-being.

According to Bennardo & de Munck (2014), "cultural models are mental representations shared by members of a culture." For example, a group of American college students might share most, if not all, of a mental representation of what it's like to take a graded exam. The exam conditions represent the core aspect of this model, while peripheral nodes of the model might be things like nervousness, a quiet room, watchful eyes of a professor / proctor, and students

focused on their task. When put together, these external stimuli, combined with the shared understanding of the topic from college students, allow individuals to make sense of what's happening around them and act accordingly. Ward Goodenough provides a definition of culture that is central within the cultural modeling perspective:

> Culture consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its members. (Goodenough 1981)

Cultural modeling thus allows for the discovery and exploration of signaled intentions, attitudes, emotions, and social context that allow individuals to make sense of the world (Bennardo & de Munck 2014). These models are flexible, in that users can modify them to make sense of specific events that they are experiencing, replacing any number of default values (constituted by the peripheral nodes with a model) within the model for ones that are more applicable in a given situation. Returning to the example of college exams, if a student were to walk into an active exam room and notice one student presenting information to others, they might be led to believe an oral examination is taking place. Here, the default value of "everyone is quiet" is replaced by "everyone but one person is quiet," and this results in a modified series of appropriate behaviors. In this situation, talking might be permitted whereas in the case of a written exam it would not be. In essence, cultural models allow users to make sense of the world around them by giving them criteria through which to interpret external stimuli, as well as guidelines for how to conduct themselves within the given situation, allowing researchers to study these interactions and interpret how shared culture influences behavior and practice (D'Andrade 1995; Bennardo & de Munck 2014).

Cultural modeling can be accomplished through ethnographic research, including elicitation techniques like free listing and pile-sorting, and the use of qualitative text analysis to

discover both the content and structure of a shared cognitive model (Dengah et al. 2020). Each of these techniques were utilized in this project (and will be explained in more detail in the next few sections) in order to construct a shared cognitive model of social play, with a particular focus on the relationship between mental well-being and the peripheral nodes of the cognitive model.

2.3.2. Free Listing

One of the primary ways for cognitive anthropologists to investigate a cultural domain is to use elicitation techniques, which are visual, verbal, or written tasks that encourage respondents to discuss their thoughts and ideas. An example used throughout this project is free listing, accomplished during semi-structured interviews to allow participants to brainstorm their knowledge around the social play cultural domain. Interviewees are given a prompt and then asked to create a list of relevant cognitive items or terms to the prompt. Dengah et al. (2020) use the example: "*What does it mean to be an American?"* Here, participants are asked to draw on cultural information they have on "American-ness" to free-form list traits and other terms that correspond with the idea in their minds. Answers might include words and phrases like *patriotic*, *God-loving, sports-loving,* or *proud*. Each respondent creates their own list associated with the prompt, and their answers are analyzed based on recurring terms' frequency and saliency (prominence) within the data set. When analyzed, certain items will become more apparent and "important" (from a cultural insider point of view) within the cultural-cognitive domain, and these items start to form the default values of the cultural model. Many items, however, can also be analyzed as idiosyncratic and more personal rather than cultural, and it is up to the researcher to determine the cultural (or more broadly shared) importance of each item. A particular advantage of the free listing technique is that the unbiased and non-persuasive nature of the prompts allows for cultural information to be provided *a priori* by respondents, without being

unduly influenced by the interpretive biases of the researcher. Free listing was accomplished throughout the initial interview phase of research.

2.3.3. Pile-Sorting

Another elicitation technique utilized by cognitive anthropologists is pile-sorting, wherein researchers iteratively build upon the cognitive units uncovered in initial free listing to more explicitly organize the default nodes of information. Noteworthy items discovered are then provided in a second pile-sorting exercise, and respondents are asked to group the given items based on their relevance to one another. For example, many respondents may group the same attributes together when discussing *romance* in the United States, such as *tall, dark,* and *handsome,* which could be united under the concept of *preferred attributes in a partner.* The resultant data is statistically analyzed (via techniques like multidimensional scaling or MDS and cluster analysis) based on the frequency and cognitive proximity of the groups created and the inferred underlying cause of their connections, with the latter determined by asking respondents to think out loud about their piles and also by referencing ongoing ethnography and other interview data. In this example, researchers might note the frequency of items in a given pile to determine the degree to which cognitive organization is more broadly shared within a group. This open-ended pile-sorting exercise allows respondents themselves to dictate the structure of the cognitive model, again providing an advantage for researchers to circumvent their biases (Dengah et al. 2020). Ultimately, pile-sorting reveals the underlying organization of a cultural model, and the items that the cultural group determines to be the most important and salient, taking cultural information provided and categorizing it in more meaningful ways.

2.3.4. Cultural Consensus and Consonance Analysis

The pile-sorting exercise, alongside rank-order data or multiple-choice questions, can be utilized to accomplish another cognitive anthropological technique, *cultural consensus analysis*. Cultural consensus, an idea initially developed by Romney, Weller, and Batchelder (1986) is an approach that allows for an investigation of culture at both the individual and aggregate levels by comparing the amount of agreement between individuals within a cultural group. In essence, "if most informants' responses are similar to that of everyone else's, we can confidently conclude that there is shared knowledge" (Dengah et al. 2020). Utilizing principal components factor analysis, researchers are able to determine whether or not there is significant enough sharing of cultural knowledge within the dataset to constitute a veritable culture, or as stated by Dressler (2018): "that they are working from a common cultural model of that domain." Briefly, consensus is achieved if the eigenvalue ratio of the first factor to the second factor (or the respondent-by-respondent correlation matrix) is greater than 3:1, indicating that the primary factor influencing respondents' answers provided is the shared cultural knowledge for that group. Thusly, cultural consensus analysis provides researchers with a veritable way to quantify the degree to which respondents' thinking and cognitive organizations are shared and allows for individuals to be compared to the aggregate. Finally, it provides a reasonable estimate of how an individual with a. high degree of cultural understanding would respond to the given prompts, referred to some as a "cultural answer key" (Weller 2007, Dressler 2018).

Further, the degree to which an individual's responses are in accordance with the collectively shared understandings indicates a certain degree of "competency" for that individual and could uncover respondents that are more readily utilizing pertinent cultural knowledge. This competency is also commonly referred to as *cultural consonance,* or how closely an individual approximates a cultural mean or "average." Dressler (1994, 2018) and Dressler et al. (2017)

investigate the relationship between consonance and health outcomes, introducing research on psychological distress and "lifestyle in/congruity", a precursor to Dressler's consonance model. Much of this research suggests that individuals in a variety of cultural settings (including the small island of St. Lucia, where Dressler initially developed these ideas) experience a greater degree of distress when exhibiting a lower degree of lifestyle congruity to their peers, resulting in negative health outcomes like increased blood pressure and other cardiovascular issues. Dressler (2018) also provides the epidemiological example of socio-economic status (SES) congruity and health to demonstrate how consonance can be applied to positive health outcomes. Dressler's research inspired the conceptual backbone of this project, to investigate the relationship between the shared model of social play and health, in this case, positive well-being outcomes.

CHAPTER 3: RESEARCH METHODS

3.1 A Psychological Anthropological Approach

This investigation was informed by a cognitive anthropological framework, taking the approach that culture can be treated in part as shared cognition (in the form of cultural models) amongst members of a society. Culture here is defined in a way that follows that described in *Systematic Methods for Analyzing Culture* (2020) and originally conceived by Goodenough (1981) as knowledge required to interpret and function within a particular social setting. As stated by Dengah et al., "Of particular interest is how this cultural knowledge creates shared understandings of the world, which allow for mutually intelligible interactions" (Dengah et al. 2020). In essence, this cognitive anthropological approach seeks to understand the content and structure of shared knowledge on meaningful topics, and how that shared knowledge translates into lived experiences. In the case of this project, that entails examining how gamers' shared knowledge on social play coincides with and affects their mental well-being, a pivotal aspect of maintaining positive emotion or what is called *affect*.

Another important perspective for this study is the idea of cognitive schemas and models, or complex networks of cultural information, procedures, and understandings that "produce and shape purposive and communicative behaviors" (Bennardo & de Munck 2014). As treated in this thesis, cultural models are (likely) unconscious representations of the world that filter and give meaning and structure to the information we obtain through our senses. An example is how a uniform for law enforcement officers in the United States - a particular assemblage of clothing and outerwear - is interpreted in Americans' minds in ways that allow them to identify individuals as law enforcement officers, judgments shaped by repeated exposure of salient cultural information.

The cultural models approach has recently been utilized in an applied research setting within the field of public health. Researchers studying cultural knowledge of NGO development, HIV/AIDS, obesity, and other related global health problems adopted the cultural modeling methodology in order to clarify the way culture shapes how illness is constructed and manifests within a population (Bennardo & de Munck 2014). In another study, Bell (2009) investigates the cultural model of *chemotherapy* among cancer patients and how the shared fear surrounding the treatment is evoked in the majority of the patients she studied. The study showed how "suffering" made radiation treatment more bearable, whereby patients saw pain as a sign that the treatment was working and that their health would improve. In this way, suffering was a "rite of passage signaling one's indomitable desire for life," a shared conceptualization of the pain that produced a determination to survive amongst many of Bell's patients: "if it doesn't kill me then it will make me stronger" (Bennardo & de Munck 2014, Bell 2009). This mentality is also reflected in Halberstam and Halberstam's (1998) research on the cultural model of the ideal American man represented in the minds of men at the time of the film *Rocky Balboa*. American male ideals centered around suffering for the good of the family, enduring punishment, and how sacrifice could lead to real-world health ramifications for many American men, including increased wear-and-tear on the body and cardiovascular issues. These studies serve as inspiration for this project by examining the ways in which cultural and cognitive modeling can be used to investigate the health and well-being of individuals within a particular culture.

3.2. An Ethnographic and Mixed Methods Approach

In order to investigate OSRS players' cognitive modeling of social play, participant observation and a mixed qualitative-quantitative-methodological approach were utilized. This mixed methodology allowed me to map the content and structure within the shared cognitive

model of social play and to quantify the degree to which participants within the study shared cultural ways of knowing. Participant-observation and interviews were used to elicit the qualitative content within this cultural model, with additional free listing techniques and other simple cognitive elicitations like pile sorts designed to help me piece together a cognitive model of social play.

This project was designed to be ethnographically iterative in nature, borrowing from the grounded theory principles presented by Charmaz and Mitchell in Atkinson's *Handbook of Ethnography*. This methodology lends itself well to cognitive anthropological studies, as it allows for identification, and a relatively free-form exploration, of critical themes in initial stages of research followed by analysis and additional data collection in subsequent research phases, ultimately leading to a grounded theoretical understanding of the role played by cognitive / cultural models in social life (Charmaz and Mitchell 2001). This ethnographic approach provides for a more holistic understanding of the cultural models being studied, initially conceived by Glaser and Straus as a systematic and flexible approach to analyzing qualitative data (Glaser & Straus 1967). A grounded theoretical approach allowed me to construct a cultural model of social play from the ground-up by finding the relative cognitive content and creating an understanding of how it is structured in the shared cognition of the groups being studied.

3.3. Ethnographic Setting and Participant Observation

Participant observation sessions were accomplished through social interaction on Twitch and Discord, as well as attending in-game social events in Gielinor. Over time I was able to familiarize myself with social groups on Runescape, becoming integrated into their social structure through repeated participation in group activities. For many social gaming groups, entry into the "ranks" of a clan can be a formal process involving demonstration of skills, in-game

knowledge, and dedication (particularly in the case of groups focused on completing difficult or "end-game" content, i.e., related to completing the most challenging aspects of a game). This was not the case for the communities that I joined during this investigation, as many were primarily focused on fostering a sense of friendship and knowledge amongst a group of like-minded gamers rather than on competitive and rapid progression through difficult gaming content. A quote from GoodVibesOfficial regarding the atmosphere of these groups was particularly exemplary of this sentiment, "It's just pixels" (GoodVibesOfficial Interview, Nixon 2022). GVO here was referring to the lack of pressure and real-world stakes within the video-game environment and that the focus of his community is to create friendships that go beyond the game's borders. This "IRL-first" (IRL refers to "in real-life") philosophy on the relationship between gaming and social connection was shared amongst almost all of the communities described in this project and was a desirable characteristic when searching for groups in which to conduct participant-observation sessions (respondents regularly drew a dichotomous distinction between the real (IRL) and virtual (online) worlds; these terms will be used throughout this paper).

Finding a social group, or what is referred to in Runescape as a "clan," but in other MMORPGs as "guilds," can be an intimidating and confusing process for first-time clanmates, based on the need to identify each group's unique shared goals, time commitment expectations, and skill/gear prerequisites for joining (certain activities require higher level equipment or "gear"). For the purposes of this investigation, participant-observation groups were primarily chosen based on their non-intensive views on required time commitment and perceived inclusiveness with respect to new-comers, in short, the groups that were *socially*- rather than *content*- focused. Social groups and clans were found through multiple avenues, including on

social media, in-game, and through Twitch streams (the most successful of which were in-game). These groups are in stark contrast to those mentioned in Snodgrass, Dengah, and Lacy's (2014) article on the problematic (and therapeutic) effects of online gaming, wherein guild members are required (in order to maintain their status within the group) to spend unhealthy amounts of time in-game to help their clan achieve difficult end-game goals. According to these researchers, these "problem gamers" experience cultural dissonance, which manifests in socio-cognitive conflicts between the gamers' offline and online lives, leading to a heightened sense of stress and anxiety and resulting in lower degrees of self-reported mental well-being (Snodgrass, Dengah & Lacy 2014). For many of the groups described in the current thesis, the communities of JordaniteTV and GoodVibesOfficial in particular, the focus of the social group was to integrate online and offline social lives rather than partition them and further to supplement individual gameplay with a social system of friends and accompaniment. Groups with open access and similar social ideals were chosen for participant-observation sessions based on these factors.

3.4. Semi-structured Interviews

Sampling for interviews was done through a combination of snowball and convenience-based methodologies, with me reaching out for potential interview candidates on Discord, Twitch, and through the in-game chat on OSRS. Participants for these semi-formal interviews were recruited based on their willingness to discuss their experiences and thoughts related to OSRS. Discord and Twitch were the primary recruiting tools for participants, as they allowed me to message groups of players en masse, reaching a wider audience and allowing for more potential participants. In the case of Twitch, I advertised that I was searching for participants to conduct a short interview related to OSRS and social gaming and participants who completed the interview would be provided with a Bond, a tradable item in-game redeemable for 14 days of

membership. In accordance with many of the item giveaways conducted on Twitch streams, I decided to also do a random-number-generator drawing for in-game cash prizes for the participants, giving away 150,000,000 in-game gold pieces (worth over $200) to a few lucky respondents. This incentivization and recruitment strategy allowed me to reach more OSRS players and encourage them to participate in the research, with many players being motivated by progressing their account and acquiring more in-game wealth. Several participants chose to forego the payment of the Bond and were simply happy to assist with our research due to their interest in the general topic and their eagerness to support and help members of their social groups (in this case me).

Each potential interviewee was provided with a consent form detailing expectations of the interview and steps the researchers could take to protect their identify if so chosen. As is the case with other virtual worlds studies, many participants chose to be identified by their in-game name, the majority of which were consistent across the online social spaces utilized, as they wanted to be known for their gaming attitudes and exploits. In the event that a participant wished to remain anonymous, I created a coded name for the individual, and kept copies of the code and cipher in separate locations as to avoid potential identification. Each interview lasted between 30 and 90 minutes (N = 15), conducted over Discord voice calls and was captured through the Craig software, a free add-on for Discord channels that allows for calls to be recorded and mixed into a single audio file.

3.5. Formal Psychological Anthropological Methods: Free Lists in the Context of Interviews

Free listing techniques were utilized throughout the (just described) interview process in order to discern nodes or units within the cultural domain of social play. Participants were asked

throughout the interviews to provide salient lists of emotions, feelings, and ideas they associated with my prompts about social play, with this method commonly referred to by cognitive anthropologists as an "elicitation technique" (Dengah et al. 2020). Such techniques allow researchers to obtain data through unbiased means by asking basic cognitive questions, an example of which would be "*What does it mean to be an American?"* Participants would then provide a list of 3-5 cognitive associations that made sense to them in accordance to the given prompt. Responses to these questions were analyzed based on the average saliency and frequency that they were mentioned by participants, with those statistics provided by the software *Visual Anthropac –Free Lists*. Due to this project's cognitive anthropological iterative approach, those free list responses and their analyses informed a subsequent survey portion of data collection (that included a pile sorting exercise) that further illuminated the content and structure of the social play cultural domain.

3.6. Questionnaires: Pile Sorts and Cultural Consensus Analysis

The questionnaire (or survey) was conducted after the round of interview data collection and analysis and was designed to further clarify the content and structure of the cognitive model of social play. Pile-sorting and Likert scale techniques were primarily utilized within the survey ($N = 50$), wherein participants were asked to group together thematic units discovered during the initial research stage and report their views on social gaming and mental well-being on a scale of 1-5. Pile-sorting in effect allows participants to mentally fit together pieces of the cognitive model in a meaningful way, allowing researchers to form a structured concept of the model. Likert scale responses (i.e., rating 1-5 in terms of importance each salient free list item) allowed respondents to "provide a gradient of (dis)agreement" on the relationship between their own mental well-being and their associations with online gaming (Dengah et al. 2020). This approach

ultimately produced a greater understanding of how gaming socially plays a role in the maintenance (or deterioration) of gamers' self-reported sense of happiness and well-being.

3.7. Conclusion

The psychological anthropological methods utilized allowed for a more substantive investigation into the role that "social play" takes in the well-being of OSRS gamers through close attention to their lived experiences and emotions. These approaches, along with an overall iterative and systematic focus, form a mixed-methodological set of procedures that allow anthropological researchers to both qualitatively and quantitatively understand their informants as members of communities, which leads to more generalizable, useful, and actionable cultural interpretations.

CHAPTER 4: RESEARCH FINDINGS: PARTICIPANT-OBSERVATION

4.1. Introduction

This project sought to maintain an *emic* research focus throughout in the way it relied on information gained directly from cultural insiders. As stated by Boellstorff et al. (2012), "We conduct research not just to mine data from informants, but to learn about their theoretical and pragmatic insights." Participants possess vital knowledge about their social worlds and how to navigate them, and an ethnographic approach allows for a deeper understanding of that shared cognition in the context of dynamic social settings. Through this approach, I was able to identify *themes* relevant to a cultural model of social play and begin to investigate their importance, as well as how those themes were organized in the minds of OSRS gamers (Ryan & Bernard 2003).

Ethnographic fieldwork for this study was conducted within the virtual worlds and online settings previously mentioned: Old School Runescape, Twitch, and Discord, with the latter two primarily being studied as communication tools and alternative social grounds for OSRS gamers, although they are culturally distinct in their own right. The ethnographic accounts presented here stemmed from in-game activities within the world of Gielinor, participation within streams on Twitch, and interactions on multiple Discord channels.

4.2. Participant Observation in Runescape and Twitch

I had played Runescape very inconsistently over the course of about 15 years, and the world of Runescape and the general concept of the game were familiar to me. However, my relationship with the game had always been somewhat contradictory to its intention: I never played with any social connection or even inclination to play with others. I traveled through Gielinor (the name of the Runescape world, an anagram of religion) and leveled up my character, acquired my items, and completed activities by myself. In a highly social environment designed

to bring players together, I explored the world largely on my own. Over time I realized that a significant portion of my experience was lacking, and without social confidence to seek out a group to be a part of I slowly stopped playing the game. A focus of this project was thus to understand an unfamiliar aspect of a familiar world, by investigating the inherent social aspect of Runescape that I, for whatever reason, never chose to participate within actively. Twitch and Discord, on the other hand, were largely unfamiliar social environments to me prior to beginning this project.

Upon logging into Old School Runescape for the first time in 218 days (the log-in screen tells you the last time you logged in), I found myself in the Grand Exchange, effectively the central marketplace of Gielinor. I looked through my bank and my inventory, seeing many items that I remember using when I was last playing the game. I clicked on the in-game menus and saw many new options and additions, including a recently launched and fully integrated clan system for players to use, and a unique menu dedicated to grouping activities. For much of Runescape's history, clans were recognized as an integral part of the player base's social structure, yet players had to organize their clans outside of in-game systems. In May of 2021, the integrated clan system was released, allowing players to more explicitly organize their clan's structure within the game itself. This update was a blessing in disguise for my project, as it allowed for a more streamlined process of finding open social groups and clans on Runescape. Twitch was also an instrumental tool for finding new social groups within the game, with players socializing in their favorite streamer's chatroom. Due to OSRS' limited communication methods (players can only message one another through text), Twitch and Discord offer an alternative and interactive social environment for players, and my ethnographic fieldwork demonstrated that the bulk of social interactions occur outside of the game itself in these other online forums.

In my initial search for social groups on OSRS, I began by playing the game "normally" and seeing if an organic opportunity would arise for me to join a clan. I spent my time doing activities in the game that were commonly done by many players in the same area, such as chopping down virtual trees for wood, fishing for pixelated sharks with a handheld harpoon, and slaying fantasy monsters. I would routinely ask these groups of players, "looking to join a clan, anyone taking new members?" Many responses were players mentioning how they're not in a clan, or that they play the game solo. Sometimes a player would respond with "yes" and describe the clan they were a part of. Unfortunately, many of these clans and in-game groups were oriented towards PKers (player-killers) and the Ironman game mode (described further on), and I didn't find much success encountering more general social groups in the game. One style of clan that fit well with the goals of the project was the *PvM* clan, or a "Player vs. Monster" group that commonly slays boss-level monsters together.[2] A prerequisite for many of these groups, however, was the possession of certain high-level items in the game, which were largely inaccessible to me due to their high price and my lack of in-game resources. While I was training my Slayer skill one day, I asked a player in-game if he was in a clan, and he mentioned that he was in a raiding PvM clan, a group that completes the most challenging pieces of content in the game with each other. When I asked if I would be able to join, he typed "LOL minimum u need scythe and tbow," referencing two of the most expensive and sought-after weapons in the game. The exclusivity of many of these groups was likely designed to allow for more skilled and experienced players to join their ranks, allowing for easier group completions of in-game content. It initially appeared as though access to these social groups was locked behind a long

[2] Clans in Runescape are commonly separated between PvM and PKing focuses, although some communities participate in both forms of combat activities.

single-player grind for quest completions, item acquisition, and skill levels; Twitch, however, showed me otherwise.

Twitch, as mentioned before, is the central hub for many gamers to live-stream their experiences for others to watch and interact with them. Games and their dedicated live streams are organized into Categories on the site, and to see all of the active streams for a particular game one needs to just click on the respective Category. I started my search for social groups in Runescape by browsing the OSRS Category, seeing that there were just over 1 million followers of the Category, and that over 25,000 people were currently watching the relevant streams. Clearly there was a large audience who wanted to watch players complete Runescape's content, and many streams were either prominent members of the game's community (B0aty, Skill Specs, Faux), or highly skilled players grinding (spending large amounts of time doing) end-game activities. I chose to click on the streams that had lower amounts of viewers as they provided a less-cluttered chat and allowed for ease of communication with other users on the site. In each of these smaller streams (>30 viewers), I found players doing in-game activities and interacting with their chat room, discussing the game and joking around with their viewers. These communities were inviting and friendly, particularly to newcomers such as myself. Fortunately, many of these communities were not seemingly locked behind a certain level of intensity of gaming, particularly useful in the case of my research into more casual and socially-oriented forms of gaming.

4.3. Emergent Themes: Boredom and the Joys of Collective Experience

4.3.1. Boredom

I stumbled upon the stream of Brotatoes, an OSRS player fighting Wintertodt, an ice-themed boss monster that is defeated through gathering firewood and burning it at designated

locations. Brotatoes described the activity as "absolutely one of the most boring things I've done" when asked about the activity and was frustrated by having to repeatedly complete the content (likely done as a means to increase his skill levels). However, the streamer was interacting with and replying to every message posted in his chatroom, joking around with his viewers, and maintaining a jovial and upbeat attitude despite "having to do" the boring activity in-game. Brotatoes ended his stream by thanking his viewers for being with him, and for "keeping [him] company during this monotonous grind." The characteristic of monotony is one that is commonly shared with activities in Runescape, as players need to spend tens to hundreds of hours to train *each* of their skills completely.

It appeared in this case that the monotonous grind, in the eyes of Brotatoes, was made more bearable by having his viewers to talk with, providing entertainment to a situation that would otherwise be un-engaging, as well as being a source of motivation to continue playing in the face of seemingly endless skill leveling. Visiting other OSRS streams demonstrated similar conceptions of a more socially oriented mindset. JordaniteTV said of his maxing grind on the game (fully training every skill to its maximum, a roughly 3–4-thousand-hour achievement): "I do not wish this on anybody… you guys definitely kept me company, it definitely would have taken longer without you."[3] Another user in the stream (Brinnybobs) mentioned in the chat, "Twitch definitely makes the grind easier <3," likely implying the ability of chatrooms to motivate their respective streamers to succeed and "continue the grind". I made note of this emergent theme relative to social play on OSRS, as well as others, to further investigate and pursue in my subsequent interviews and surveys with players.

4.3.2. Collaborative Knowledge Building

[3] In several instances I will be reproducing the in-game or Twitch text chat quotes verbatim, some of which have non-standard punctuation and grammar.

Another emergent theme within my ethnographic research on social play was the idea of collectively building in-game knowledge. Many streams were of players grinding bosses on the game, with each boss having unique mechanics to learn and master. In the case of bosses designed to be defeated by players earlier on in their adventures, these mechanics tend to be simpler and do not require advanced skill to overcome. However, for bosses designed for end-game players (those who have acquired the best skills and items in the game), boss mechanics can be complicated and require prior knowledge, as well as dexterity with in-game actions, to defeat.

Dearlola1 is a music producer and OSRS streamer on Twitch, and as of writing this paper is the #2 overall player for Inferno completions in the game, the piece of PvM content that is widely considered the most difficult to defeat. Lola is an incredibly friendly and upbeat streamer, and consistently has a noticeably positive affect whenever he goes online, regularly and excitedly interacting with the viewers on his channel. His streams almost always consist of Lola completing the Inferno while a large audience watches and learns his strategies. Often viewers ask him questions about how to be more successful in the Inferno, with Lola providing relevant advice and, in many situations, encouragement. When a known viewer entered his chatroom and said that he failed the Inferno at the very end, Lola responded, "You got this bro! Seriously, I've seen you make so much progress in the last two weeks, you were so close! Take a break and try again man, you can do it, I promise you." Within the next 24 hours, this user had his first Inferno completion, and explicitly thanked Lola for motivating him to keep going: "Never coulda done it without you bro, cheers x." Through Lola's stream, viewers learn critical skills that enable them to complete the most challenging obstacles the game has to offer, as well as receive encouragement and kind words that motivate them to keep grinding. This also applied to the

many other streamers broadcasting other challenging content in Runescape, with users turning to Twitch to gain valuable knowledge on the game's mechanics.

4.3.3. It's More Fun in Groups

My ethnographic fieldwork also introduced me to the emergent theme of the game being simply more entertaining in group settings. In October of 2021, Jagex released the "Group Ironman" game mode, allowing players to form self-sufficient groups to play the game together in an integrated way. On the release, Twitch's OSRS Category was flooded by players beginning the game mode, forming their teams and discussing strategies of how to play together. One of the more prominent content creators in Runescape's community, 7asty (now branded as TastyLife), began a Group Ironman team with other content creators and was immediately "theory-crafting" for how they should delegate responsibilities. Each player had their role, and completing their respective tasks allowed them to make progress in the early game more easily and allowing them to "enjoy" the game more quickly. ZoePancakes, another member of the group, was streaming the game mode and emphasizing the amount of fun she was having, saying that she was "making friendships that will last a lifetime!" The chatrooms were regularly filled with messages talking about how much more fun Group Ironman seemed than the normal Ironman (self-sufficient, solo) game mode, simply because they could play the game with their friends an an integrated manner. "Yeah GIM looks cool, drops matter more. gonna be way more fun to get drops that everyone can all use," one Twitch user stated, implying that the lucky acquisition of in-game items will be more entertaining and remarkable when a team shares the items they can use.

4.3.4. Joint Achievements

Similarly, the theme of sharing in-game achievements became prominent through my ethnography. Players spend many hours completing activities in order to acquire wealth, unique

items, and level their skills. Many OSRS players, both in-game and on Twitch, remarked that it was meaningful to be able to share their accomplishments with others and made the playing experience more entertaining. When asked whether or not hearing "gz" (colloquial game term for congratulations, or short for "gratz") after accomplishments made a difference to him, OSRS streamer GoodVibesOfficial stated, "I love getting gz's, it feels amazing. sure it feels good hitting that milestone, knowing its done, but seeing everyone support me really motivates me to hit the next one. it just feels nice." A viewer in Dearlola1's stream stated that hearing positive feedback on their achievements "makes [the grind] worth it," and continued by saying "idk it just makes me happy. people are impressed by what i did. makes me feel like i really did something." In my personal experience, I was able to acquire my first in-game pet in OSRS, which are rare cosmetic items that follow a player's character around Gielinor, during my fieldwork, and the JordaniteTV clan chat was filled with players congratulating me for my luck on the achievement (players can spend hundreds of hours "hunting pets" [unsuccessfully] through various methods). It was admittedly a very nice feeling seeing how many people were surprised by my luck, and it was particularly enjoyable being a source of envy from others. "KEKW ABSOLUTELY SPOOOOONED, gz tho" said LrgPanda, remarking on how incredibly lucky it was to receive the cosmetic item, utilizing the colloquial analogy of being "spoon-fed" an item that takes a long time to acquire.

4.3.5 Conclusion

Other themes emerged during my ethnographic fieldwork, but the most notable were those that were focused on the benefits of the multiplayer experience on the game. Players were utilizing various social avenues to share their achievements with one another, mutually build and share knowledge, and motivate them to continue grinding and investing time in their virtual

characters. These themes, along with key words and phrases uncovered through an *etic* (or cultural outsider) analysis of fieldnotes, were used to create an interview protocol that would further explore them, as well as uncover new themes and cognitive schemas relevant to social play in OSRS.

CHAPTER 5: RESEARCH FINDINGS: INTERVIEWS AND FREE LISTS

5.1. Free List Prompt 1: Social Play

As previously mentioned, an interview protocol was designed for this project that iteratively built on earlier participant-observation fieldwork, allowing for the further investigation of emergent themes. The protocol was simultaneously designed to allow for *emic*-focused responses from our participants, focusing on their unique individual understandings of the game, as well as their shared, cultural understandings of social play. For example, each participant was asked to complete a free list exercise with the prompt, "Why is Old School Runescape a good game, and what has kept you playing it?" During ethnographic fieldwork I was exposed to various motivations for playing the game, including nostalgia, the simplicity of the game, the combat system, the AFK-ability of the game ("away from keyboard" signaling the lack of attention required for many forms of play), and how fun the experience was with friends and clan-mates. The initial free list exercise was designed to investigate these motivations and the degree to which they were shared, ideally discovering some form of priority (or saliency) as well.

Responses were collected and imported into *Visual Anthropac—Free Lists*, a software program that allows for the analysis of free list data. **Table 1** shows the results of this free list exercise after combining similar responses into common categories. Players were primarily motivated to play the game because of its *social elements*, the strong appeal of *nostalgia*, and being able to play an *open-ended game* with many unique approaches and strategies. During their interview, SheepWaffle stated that OSRS was "totally unlike other MMO's… you can play it however you want," and made a point to mention how playing with others can relieve boredom and provide financial and emotional support in-game. In SheepWaffle's case, "staking at the duel

arena" is effectively a way to gamble within the game (as of the writing of this paper Jagex has removed this from the game), and players could utilize social contacts to obtain significant loans and receive moral and ethical support on losing streaks, not dissimilar to processes characteristic of real world gambling.[4] GoodVibesGreg was initially playing OSRS by himself but was inspired to create a clan in the game when he joined a Twitch channel's group and had a more satisfying experience through social play. "I played solo for a very long time, and I was like, man, this is weird… there was that social aspect and I felt like I was missing that." Creating his own community from the ground up allowed GoodVibesGreg to begin creating social capital within and outside of the game and foster a sense of togetherness and cooperation amongst like-minded OSRS players. According to GoodVibesGreg, the game's community allows for a mutually beneficial support network amongst its members, particularly when it comes to the long hours required to make progress in-game.

> The grind can be grindy, we love to talk about the grind… we love to motivate each other. A cool part that I've seen is that I've encouraged a couple people to keep maxing, they haven't been burnt out. It's just encouragement. (GoodVibesGreg Interview 2022)

GoodVibesGreg's community also allowed for players to exchange information they possessed about the game, with more experienced members providing new tips, tricks, strategies, and approaches for those looking to expand their in-game knowledge. In his words,

> I would say like 60% of [my] knowledge came from others… and there's so much new content… If there's something I may not know, I have my community. We learn from each other." (GoodVibesGreg Interview 2022)

[4] Duel Arena Staking is when players fight one another on agreed-upon terms, and the most common terms effectively result in a 50/50 chance for either player to win. This activity is no longer available on OSRS as a result of players fighting for its removal due to the habit forming and destructive nature of staking / gambling.

In the case of LrgPanda, OSRS was a means for him to play a game with one of his friends, and nostalgic memories of playing the game as a child were a primary factor in choosing Runescape, as well as his friend already having a well-established account. Panda became a highly dedicated player of the MMO and was able to max out all of the skills on his character within a year of creating his account, ultimately with the goal of being able to complete content with his friends. The sense of community was also a significant factor for Panda, citing the supportive and familial nature of the friend groups he's come across:

> There's communities out there like Coif Gang and HawkeyeDP where you see the good… they're willing to speak up and talk for one another. It's because it's like a family… Since Day 1 I've always felt like I've had someone to play with. (LrgPanda Interview 2022)

The perceived benefits of group / social play in OSRS became apparent early on when discussing players' motivations for playing the game and spanned from simply having others to experience the game with, to providing support networks and sources of encouragement, as well as mutual construction of in-game knowledge. These themes were prominent within the majority of my interviews and were chosen to be explored further within the pile-sort and questionnaire portions of my research described in the next chapter.

5.2. Free List 2: Emotions Experienced During Solo vs. Social Play

Interview participants were also asked to create free lists describing the emotions that they experienced when playing the game by themselves, as well as when they were playing the game with others. Throughout my ethnographic research on Twitch and OSRS, I began to notice several key differences between playing the MMO solo vs. with friends, particularly a discrepancy between the two in terms of positive emotion or affect. For example, several OSRS Twitch streamers were observed *grinding* or *skilling* item requirements (important to progress

through the game) and were noticeably bored or unexcited.[5] This was particularly the case for the streamer IAmKeeferz, who was completing his Runecrafting training, an endeavor which (on average) takes around 300 hours in-game time to accomplish. The process of completing the skill was found to be repetitive and mundane, and IAmKeeferz rarely discussed what was happening in-game unless he was commenting on how bored he was. "And that's level 87 RC… only forever more to go. *sigh* God this sucks… I don't think I could do this without you all keeping me company… I'd go insane" (IAmKeeferz observation, 2022). Similarly, the streamer Brotatoes was training his Firemaking skill and was asked by a chatter about the content he was doing in-game. "It's Wintertodt… this boss where you throw logs on a fire to take him down… absolutely one of the most boring things I've done" (Brotatoes observation 2022). In both cases, these streamers were highly interactive with their chatrooms, and they were able to continue grinding because of the support, motivation, and entertainment of their viewership, as shown here:

> Thank you so much for hanging out with me today guys… [and for] keeping me company during this monotonous grind. (Brotatoes observation 2022)

It appeared as though there were clear differences between emotions experienced when playing alone and when playing socially, with IAmKeeferz's and Brotatoes' chatrooms providing a critical source of entertainment, social interaction, and encouragement during long periods of otherwise monotonous or unexciting grinding. These perceived differences led me to conduct my second free list exercise during interviews, asking respondents to list of emotions they experienced during the two forms of play. **Tables 2 and 3** display the results from this free list

[5] Many items on OSRS have a level requirement in one or multiple skills to use or to equip and grinding the pre-requisites for new items and gear is a routine aspect of Runescape gameplay. Through this process, players can acquire and use more efficient tools as well as stronger weapons and armor, and harvest more valuable resources.

exercise, which effectively confirmed my thinking regarding the difference in emotions experienced in solo as compared to group play. Interview respondents most frequently reported that they felt *bored* when playing OSRS by themselves, with 69.2% of responses being reasonably related to boredom, a theme also illustrated in this quote:

> I think it's really important [playing with others] … If I didn't start watching Jordan or Tyler for instance and joining a clan that is fun… I seriously think it would be so boring playing by myself… Achievements pop up in the chat and everyone congratulates you, it makes you feel good… If I was alone, it would be kind of sad. (FreshPrincess Interview 2022)

A significant portion of respondents reported that they *don't play alone* (30.8%), maintaining some level of social connection every time they play (or perhaps an injunctive not to play in that manner), watching Twitch streams, interacting with clan-mates and friends, or socializing on Discord. At some points, however, solo play is inevitable in the world of Gielinor, as everyone has different schedules and has progressed to different points in their accounts, or they're simply not available online. However, according to FreshPrincess, "it's always better doing [content] with someone else," through mutual competition with friends and having social interaction to make monotony more exciting.

> I'm usually never playing alone, and if I am it's just because I'm skilling, but if I am playing alone then I'm usually on Discord anyway with people that are in the clan, and if I don't have anyone in Discord, I'm watching a stream. (Situals Interview 2022)

Interview respondents also reported that they were *focused* and *grinding* when playing solo, with both responses having a frequency of 30.8%. Instead of playing or interacting with friends they are able to "stay focused and in the zone" in the absence of social interaction, leading to greater

overall efficiency and faster progress for their characters (OSRSDragonHunter Interview, 2022). In this way, players are able to progress their characters, acquiring skill levels and items that they need, albeit in an environment that is notably less fun and engaging than through a socially inclined alternative. Many players, particularly in the cases of GoodVibesGreg, LrgPanda, Situals, and FreshPrincess, hardly ever play the game without some degree of social interaction, allowing them to experience the game in a more fun, exciting, and enjoyable way.

The trend towards more positive affect when playing with others was made particularly clear through this round of free list exercises. **Table 3** shows how respondents replied when asked about their thoughts and feelings during social play more broadly, with a majority of the players (61.5%) indicating that they are *having fun* and enjoying playing more than they would alone. This came as no surprise, as many OSRS streamers and players during our ethnographic fieldwork displayed higher affect when gaming with others (as a side note, in the case of streamers who monetize their gaming, high affect while broadcasting can contribute to their success on the platform and could also explain the observed behavior).

> I did a 12-hour agility and crafting stream, and I just would not do something like that without people to hang out with. It would be insane behavior. [Social interaction] makes it all better. (Tyler2Moons Interview 2022)

Several respondents also reported social play to be more *exciting* (38.5%) than solo play, which appears to be particularly fitting when considering the nature of the video game itself. “Grinds” are tedious tasks that are completed in the game in order to meet requirements for progressing through more advanced levels of in-game content, and in many cases, these are accomplished by completing simple but time-consuming quests or gathering and processing resources, which allows players to level their skills (“skilling”). These processes were notably “boring” and “not

fun" to our respondents, while group experiences inherently involved more fun and excitement. Conversely to solo-designed content, group content is more engaging, with players working together to explore dungeons, solve intricate puzzles, and conquer powerful monsters ("raiding" and "bossing"). This gameplay was designed to be more challenging and require collaboration, making for a hectic, exciting, and inherently social experience within a medieval fantasy world. This led me to conclude that the engaging and collaborative nature of group-designed content in the game contributed heavily to the *exciting* experience that players were reporting.

Secondarily, players also have the opportunity to acquire wealth and powerful items through group-oriented *raiding* and *bossing* content, contributing to a sense of excitement when the group finally "gets the drop" (referring to when a monster or activity gives a useful or rare item as a reward for completion or defeating the monster opponent).[6] In some cases, drops can be as rare as a 1/1,000,000 chance to obtain them, leading players to "grind" many iterations of an activity in order to acquire a specific item.

> (On getting a drop) There's no better feeling man, there's no better feeling. It's like winning the lottery… after spending your life savings on it. You won, but also like the relief of it being over. (Tyler2Moons Interview 2022)

Respondents also reported that social play allowed them to *teach* and *help others* with learning the game and becoming a better player (30.8%). As is the case with many MMORPG-style video games, OSRS is a large, open-world game with endless approaches and strategies, and consequently contains a breadth of information to learn in order to be successful. Social play allows for greater exchange of information between players, introducing less-experienced Runescape players to new approaches and strategies through a collective knowledge-building

[6] Raiding: completing difficult puzzles and boss monster encounters in succession to acquire rare end-game items and abilities. Bossing: Slaying many of a particular boss monster in search of the rare items that they can drop.

process. LrgPanda considers teaching others to be a central part of his experience with the game, largely due to other players doing the same for him in his early days of Runescape. He wanted to "repay the kindness" (his words) that was shown to him when he knew relatively little about the world of Gielinor as a child. He now conducts "learner raids" on Fridays, teaching difficult pieces of content to players that otherwise find them inaccessible and overly challenging.

> It's so sick to watch people learn, new people start to show [up], etcetera. You can literally watch them get more confident, it's almost poetic. (LrgPanda Interview 2022)

A particularly interesting response in this free list was the concept of social play making grinds *bearable* (15.4%). When considered alongside the "boring" and "monotonous" solo grinding in OSRS, social play offers a way to supplement the solo experience and make the grind more enjoyable, breaking the monotony and introducing an element of engagement. In the case of streamers like Tyler2Moons, Jordanite, and GoodVibesGreg, their followers and subscribers make tedious and repetitive grinds easier to endure by providing them with entertainment and social interaction, as well as financial support and compensation. The same applies to non-streaming players, albeit without any form of monetization for their gameplay. Simply put, "having someone to talk to just makes the time fly by," (Situals Interview, 2022) and makes the long "grinds" less mentally-taxing on OSRS players. I would argue that players who take advantage of their social networks display greater resistance to being "burnt out" from the game, motivating them to continue playing and reinforcing the strength and benefits of their social ties online.

5.3. Prompt 3: Group Play Memories

Table 4 displays the results of my third free list exercise, with players being asked to recall a memory relevant to playing socially / in a group, and to describe the emotions and thoughts

they were experiencing at the time. A significant portion of my respondents (46.2%) indicated having a strong sense of *friendship* during group play, which appears to be somewhat obvious; players can create and strengthen social connections through collaborative play by meeting other players and conquering challenges with them. Several respondents' most salient memories relative to group play involved end-game "raiding" with their friends or clan-mates, creating indelible moments through exciting, difficult, and collaborative gameplay.

> (On raiding) We learned everything together, and I'll always remember that… I'll never let that memory die, its that excitement and that joy of doing something you thought you could never do. (LrgPanda Interview 2022)

GoodVibesGreg recalled a "Skill of the Week" event with this prompt, which is a player-created group competition, primarily done within clans or friend groups, to see which individual player can obtain the most experience in a particular skill over the course of 7 days. The memory involves Greg and two of his clan-mates training their Firemaking skills, transforming what would normally be a "boring" and "monotonous" grind into a competition amongst the players. Over the course of that week, Greg and his clan-mates were able to all make significant progress with their skilling experience and were motivated to do so through the added element of competition, with the experience being made more enjoyable through the countless jokes and banter between the players (GoodVibesGreg Interview, 2022).

During the course of my fieldwork, I participated in a "Skill of the Week" event through Greg's clan and Discord, allowing me to see firsthand the difference that a competitive motivation makes for OSRS players. The chosen skill was Fishing, and over 15 players decided to participate in the event. At first, I was casually fishing, but was motivated to train more intensely once I saw how much other players were progressing through the skill. I've never been

a particularly competitive video-game player; however, it became a source of pride to showcase my knowledge of the game against that of others. I found myself training my Fishing skill more willingly than I ever had before (normally it requires very little attention - "boring" and "AFK"), driven largely by the competitive nature of the Skill of the Week event. Interestingly, a friendly competition appeared to transform something that was initially boring and monotonous into something that I was strongly motivated to do, and I found myself looking forward to it every day that week. The experience was simply more enjoyable with the added element of a competition. I would argue that friendly competitions, such as Skill of the Week events, constitute a unique form of motivation for players to continue playing the game and completing repetitive "grinds," inculcating players with some degree of resilience towards becoming "burnt out." This resilience could also be amplified through a sense of togetherness and camaraderie experienced when having others to play with, giving players further reason to immerse themselves within the world of OSRS.

Curiously, a few respondents (15.4% of the sample) indicated experiencing some form of *stress* or *anxiety* during the memory recall free list exercise on social play. Both players were formerly player-killers, an activity in-game that allows players to engage in combat with one another in an effort to claim the other's valuables for their own. Both Moonriver and SheepWaffle reported that the activity (colloquially referred to as "PK-ing") inherently involves a high degree of risk as well as reward and going out into the Wilderness (an area where player vs. player combat is always enabled) with friends helped to mitigate some of that risk. In essence, having a strong team able to cover each other's backs allows for the group to assume less risk overall with each additional player contributing to the safety of the team. While the

situation of player-killing is innately stressful, this experience can be significantly mitigated simply by having strong clan-mates, combatants, and friends by one's side.

5.4. Free List 4: Covid Pandemic and Online Sociality

The final free list exercise conducted during my interviews was focused on the effects of the Covid-19 pandemic on the general social behavior of OSRS players. As previously mentioned, the Covid pandemic resulted in a much higher daily average usage for OSRS, Discord, and Twitch, largely stemming from the widespread stay-at-home orders initiated to protect public health. People were suddenly turning to the internet in order to satisfy their need for social belonging, and to remain in contact with friends and family. Players simply had more time on their hands (in many cases people lost their employment or source of income) and utilized their available resources to "scratch the social itch" (RegentalAsh Interview, 2022).

> Covid sucked, yeah, but if it wasn't for the social aspect of my clan, I wouldn't have had the motivation to keep up with the game. (RegentalAsh Interview 2022)
>
> (On Discord calls during Covid) Even though you're not [physically] together, you're together. It felt really positive for all of us to have that connection. We needed it. (Moonriver Interview 2022)

Table 5 displays the results for this free list exercise, with 76.9% of respondents reporting that they were *less social in their offline lives* because of the Covid pandemic. Conversely, many players (53.8%) also reported that they were *more social in their online lives*, turning to an online social environment to satisfy their need for social belonging. According to FreshPrincess, the pandemic both "forced [her] to be home… and also forced [her] to socialize," contributing to a transition to online social spaces in search of social capital. In essence, the internet became the most convenient way to "scratch the social itch" that RegentalAsh noted and provided a way for

people to stay connected in the absence of one another's physical presence during the pandemic. Instead of going to a restaurant or a sporting event with friends, people were able to log onto virtual worlds (OSRS, Discord, Twitch, etc.) in order to seek out social connection. These virtual worlds, as a result of the pandemic, seemingly transitioned into more veritable "third places," introducing their participants to a way to develop and maintain social relationships, all while within a comfortable and relaxed environment (Steinkuehler and Williams 2006). This free list exercise helped to support my hypothesis that social outlets on the internet would become increasingly important during the Covid-19 pandemic, particularly as a way for people to stay socially connected to others while simultaneously feeling socially isolated. In the case of the respondent OSRSDragonHunter, he took initiative to bring people back together socially, creating Discord groups for students on his campus to stay connected and to mitigate the collective feeling of isolation (OSRSDragonHunter Interview, 2022).

Interestingly, 38.5% of respondents reported experiencing a *heightened / elevated sense of confidence in social situations* as a result of the Covid-19 pandemic. This appeared to be counter-intuitive at first (anecdotally, it appeared as though everyone was more timid socially), but made more sense when considering the relative anonymity offered by the aforementioned online social spaces. These spaces allow individuals to identify and present themselves to the degree to which they feel comfortable, translating into more confident social behavior. In LrgPanda's case, he experienced a crisis of confidence as a result of the Covid pandemic, unable to be the "serial talker" and socialite that he had been accustomed to. During the pandemic, Panda stumbled upon the Twitch stream for Hawkeye_DP, and suddenly "[his] whole personality changed." He was once again motivated to be his friendly and social self, contributing the change in part to Hawkeye's ability to foster a supportive and fun community.

> Its just like the normal social life, except not IRL… it let me experience what I otherwise couldn't… I'm glad I took the chances [socially] that I did. (LrgPanda Interview 2022)

As a side note, several respondents (30.8%) mentioned that *Discord* became a more important aspect of their social life during the Covid pandemic, mirroring the increase in daily average usage observed during the initial stages of stay-at-home orders being issued. This fact substantiates the idea that people were turning towards the internet in order to maintain social ties during the Covid pandemic, and while the world has transitioned back toward in-person socialization, Discord has remained a particularly important way for socially oriented MMORPG gamers to stay connected to one another.

5.5. Discussion

My free listing exercises were particularly important to identify and begin to categorize the elements of a "social play" cultural model for OSRS players. In essence, the responses provided during our interviews provided the basic, collectively valued default nodes and units of the cultural model, resulting in an amorphous, lengthy, and somewhat messy list of key words and phrases relevant to gaming with others. Several nodes of the cultural model were found to be particularly important to OSRS gamers, most notably including the higher degree of affect, motivation, and sense of support provided through playing within social contexts. Players reported being more excited and motivated to play through social contexts and were noticeably more animated when discussing memories of playing the game with their friends. The more engaging and collaborative nature of group-oriented activities within the game allowed clans and social groups to come together to conquer seemingly impossible challenges and acquire massive amounts of (virtual) wealth, resulting in a more satisfying and enjoyable experience for those who participate. These experiences also allowed for the creation and maintenance of social

capital, with players developing new friendships and connections in a more leisurely and relaxing environment.

Kovess-Masfety et al. (2016) suggest that social and collaborative online games provide an environment that fosters prosocial (positive and helpful) behavior, with players becoming more inclined to help one another both within a game's setting as well as in real-world settings. The development of in-game skills that translate to real-world contexts is not new to researchers, as Snodgrass et al. (2020) posits that gamers are able to learn healthier strategies for handling failure in gaming situations, which they then carry with them into the real-world. Similarly, the analysis of the free listing exercises leads me to believe that OSRS gamers develop prosocial habits through their in-game friend groups and social experiences, with players subconsciously conditioning themselves to more willingly assist, as well as rely on, social others. The increased level of prosocial behavior could also be explained as a product of the personalities of those who choose to play social and collaborative games online, with more socially inclined individuals gravitating towards these environments when choosing their preferred leisurely activities. In essence, the environments in OSRS and other MMORPGs may be more attractive to individuals who spend their free time socially as opposed to on their own. Follow-up research should address this idea in an effort to see if more socially inclined (extroverted) individuals are attracted to OSRS, and MMORPGs more broadly.

The solo experience on OSRS, according to my respondents, appears to heavily contrast that of the social experience, with solo play being collectively regarded as boring, monotonous, and time-consuming. Solo play was most commonly associated with the concept of "grinding," with players spending long periods of time dedicated to increasing their skill proficiencies or acquiring powerful new items and abilities for their characters. In fact, several respondents stated

that they never truly play solo and were, at minimal, socializing with others in order to keep themselves occupied during their "grinding" sessions. This phenomenon can most easily be explained through the integrated "clan chat" system within OSRS, as clan members are automatically placed into their clan's private chatroom each time they log in (every respondent was in some capacity part of an OSRS social group or clan). This system allows friend groups to stay connected even when playing separately and suggests that a social orientation provides some form of resilience to boredom and motivates players to continue playing, in turn reinforcing the social connections that they form through the game and encouraging them to continue playing within a social context.

For OSRS gamers there appears to be a clear demarcation between social and individualistic play, with players having a more positive and enjoyable experience when playing with others, or simply by having others to converse with during periods of boredom. A social orientation also allows gamers to participate in mutual knowledge-building, introducing players to new strategies and methods for playing the game. Respondents reported being more productive and time-efficient in making progress on their characters, however, in less social in-game contexts, suggesting that players may need to "suffer through" long grinds in order for their characters to become powerful enough to earnestly contribute to a team's success in challenging activities. Fortunately, OSRS gamers are able to turn to their social networks to keep themselves reasonably occupied and engaged while spending hundreds (or even thousands) of hours completing "boring" and "monotonous" activities.

In accordance with this thesis's grounded theoretical approach, free listing exercises allowed me to pursue and uncover the content of the "social play" cultural model for OSRS players. In order to provide some clarity to how this cultural model is organized in the minds of

OSRS gamers, I subsequently conducted an unconstrained pile-sort exercise, with respondents freely grouping the most frequent and salient free list responses in ways meaningful to them; the results of this exercise are reviewed in the following chapter.

CHAPTER 6: RESEARCH FINDINGS: QUESTIONNAIRE, PILE SORTS, and CULTURAL CONSENSUS ANALYSIS

6.1. Solo vs. Social Gaming: Pile Sorts Displayed Via Multidimensional Scaling (MDS) and Cluster Analysis

Upon completing the interview phase of this research, the most salient responses from each of the free listing exercises, as well as key words and phrases mentioned in ethnographic sessions (determined to be important through an *emic* understanding of the OSRS social gaming culture), collectively formed the unorganized cognitive content relative to the OSRS cultural model of social play. In order to reveal some degree of importance and organization to this content, a subsequent survey was created, and respondents were asked to group together into separate piles 35 salient cultural items according to their shared qualities. Respondents were given full control over the groups of items that were formed, allowing for both idiosyncratic and collective understandings of social play to be displayed. The results of this exercise are shown in Figure 1 and Table 6 (PS_MDS and PS_Consensus).

Figure 1 displays the multi-dimensional-scale (MDS) aggregate matrix and analytical clusters for the groupings of items that were formed in the pile-sorting exercise. Respondents (N=9) determined there to be two distinct groupings of items within the cultural model of social play, distinguishing between approaching the game in individualistic and social ways. For example, the grouping of items of the left-side (Group 1) of the MDS include “nostalgia,” “open-ended game,” “dopamine rush,” and “online escape,” all indicators of individual motivations to play OSRS. Meanwhile, the grouping of times on the right-side (Group 2) includes “making

friends," "helping others," "sharing achievements" and "guilds," all aspects related to the social elements of the MMORPG.[7]

Respondents were also asked to briefly explain the reasoning behind their groupings, with one respondent creating a "Leveling" pile in Group 1 consisting of "grinding," "maxing," "watching streams," "getting levels," and "skilling." The respondent described this group as "the basics of the game and probably why people start playing it at first." (TerrorPoes Interview 2022). Similarly, another respondent created a grouping they titled "Completionist mindset," which included terms related to the experience of players wanting to accomplish everything the game has to offer: "dopamine rush," "good RNG," "grinding," "maxing," "getting good drops," and several others. These terms are "what drives lots of players forward in the game," consisting of the (mostly) boring and monotonous methods of making one's character more powerful and prestigious.

Interestingly, another respondent described the game overall as an "online single player game," noting that the multiplayer (or social play) aspects are "optional," and "while playing the game enhances the experience for most, it is not an integral part of the game" (Stukovia Survey 2022). This statement suggests that while OSRS is inherently socially oriented, not every player chooses to approach the game with a social mindset. For these players, the social aspects and systems of the game are less important than achieving new levels and experiencing all of the game's content. The "grind," marked by lengthy and time-consuming endeavors, as well as a more "relaxing" and "AFK" (away from keyboard) approach to gameplay (little attention is required), is a primary motivation for non-socially oriented OSRS gamers, with these players choosing to focus on the accrual of experience points and in-game wealth rather than the creation

[7] The labels for these items can be found below Figure 1 in Appendix 1.

and maintenance of social capital. For players with a less social approach to the game, the multiplayer experience is viewed as "optional" instead of as an innate aspect of one's time on OSRS. Gamers who utilize this solo approach also seem to be focused on "efficiency" to a greater degree than their social counterparts, by learning the ins and outs of the game at a higher rate in a constant effort to get the most experience and money that they can, ultimately reducing the time required to complete their goals.

The MDS for the pile-sorting exercise (Figure 1) also revealed a grouping of items related to the social experience of OSRS, constituted by Group 2 on the right of the diagram. Most notably, these items include, "community," "teaching others," "making friends," "guilds," "sharing achievements," "being supportive," "laughing," and "making memories," as well as socializing with others on both Discord and Twitch. Instead of finding motivation through the accrual of powerful items and skill experience, the social play approach appears to focus more on motivation through collective story-building and positive affect.

> I play the game to have a good time. Surrounding myself with people that also want to have a good time, just makes everything feel better. Sharing experiences and suffering is part of OSRS! (KilledCovid Survey 2022)

Respondent KilledCovid suggests here that their motivation to play the game is primarily driven by the desire to enjoy their experience, and their level of enjoyment is directly affected by their ability to play and socialize with others that share the same socially oriented goal. According to this respondent, going through the same difficult experiences as other players, as well as being able to commiserate on their shared experiences, is an integral part of the game itself, allowing players to more explicitly enjoy their gameplay rather than simply suffer through it. In the words of respondent TerrorPoes, "it definitely helps the game stay fun by sharing experiences while

they're happening," suggesting that the concept of "suffering together" takes what would otherwise be labeled as "boring" and "monotonous," and transforms it into a positive and collective way to play the game. In other words, a social approach to the game introduces an aspect of enjoyment and positive affect to an environment that is normally devoid of fun and focused on efficiency. Surprisingly, our item 28 for "suffering together" was not found to be commonly grouped (via cluster analysis) with other items related to the social experience on OSRS, despite several respondents noting the positive emotions experienced when being able to commiserate with other players on their lengthy grinds. However, "suffering together" was placed just outside of the social play Group 2 (in the MDS it is close spatially to those social items), indicating that there is some degree of a relationship between collective story-building, suffering together, and a more positive experience gleaned from the MMORPG. Future research on MMORPG-style games should address this relationship in order to discover the degree to which collective story-building affects players' experiences; we would hypothesize this relationship to be a positive one, particularly in the case of OSRS and its extremely time-consuming nature.

> The rush of being able to play with your friends sharing the experiences you had while leveling or doing content that people never have, makes that day so much better and the "grind" behind it so much more worth it in the end. Especially the suffering part :) (Kittymouse1 Survey 2022)

Another noteworthy theme within the Group 2 pile-sort was the idea that players could "make memories" together through their shared gameplay experiences, indicating that a social approach has the potential to add an element of indelibility and saliency to the events that take place in-game. This phenomenon could likely be explained through the more positive affect and social

enjoyment experienced through this approach, with players making a stronger cognitive connection between their shared-gameplay and positive emotions. Interview respondents hinted at this relationship during our earlier phase of research, with many players, (GoodVibesGreg, LrgPanda, Situals, FreshPrincess, etc.) becoming noticeably more animated when discussing salient memories of group experiences in-game. Each of the memories recalled were unified by a stronger sense of positive affect, with players describing the situations as "a ton of fun," "being a source of envy for others," and "laughing and having a good time." Michon et al. (2019) suggests that highly demanding and rewarding experiences result in stronger, more salient memories being created, supporting the idea that a social approach on MMORPG-style games (driven by overcoming challenging obstacles and acquiring large amounts of wealth, as well as providing a "reward" of more enjoyable gameplay and positive emotions) facilitates the creation of lasting memories in the minds of players.

Overall, the pile-sorting activity seems to display two distinct approaches to playing OSRS: one centered around playing by one's self in order to efficiently make progress in the game, albeit characterized by long periods of low affect and focus on improving one's character, and one primarily concerned with experiencing the game collectively, with players engrossed in an environment of high affect, social engagement, learning, and making lasting memories. This claim is supported by the consensus analysis of the pile-sorting activity (**below Table 6)**, which indicates that the primary factor driving the grouping responses was likely the cultural knowledge gained through playing OSRS (*EigenValue* = 3.382, *Eigenratio* = 18.179). In other words, all of the respondents were likely drawing upon the same cultural knowledge to produce the answers given. This indicates that OSRS players en masse likely share a binary conception of the game in terms of solo vs social play. However, our sample size is small (N=9), and our

results could be a consequence of more socially oriented players being more inclined to participate within our research. Future research should gather a larger sample population of OSRS gamers (N ~ 50), perhaps randomly selected from certain communities, in order to more wholly determine the degree to which the solo and social experiences on OSRS (and other MMORPGS) are shared more broadly among these players. The pile-sorting exercise was also found to be difficult for some respondents, with only 9 of a possible 22 responses able to be considered for our analysis.[8]

I originally hypothesized that players utilizing a social approach to the game would report more positive experiences, and thus a higher degree of happiness and well-being, an assumption that appears to be supported by ethnographic fieldwork, interviews, and pile-sorting data, as illustrated throughout this section. When considered alongside Seligman's (2011) PERMA model of happiness, a social approach to gaming may contribute to an overall sense of well-being for relevant gamers, including demonstrable examples for each category outlined in Seligman's model. Various aspects of the PERMA model, in relation to the social play cultural model of OSRS gamers, were tested within the culminating research survey, with respondents being asked to determine the extent to which they agree with, or disagree with, 33 Likert-scale propositions. Various aspects of the social- and solo-play cultural models were tested in relation to categories within the PERMA model. The results of this exercise are reviewed in the following section.

6.2. PERMA in Social Play

6.2.1 Descriptive Statistical Results

[8] 12 of the 22 respondents created one aggregate list of terms that were applicable to their experience on the game (as opposed to multiple smaller groups of terms), and one respondent did not complete the exercise. If we had more time available, this segment of the survey would have been another round of semi-structured interviews.

Another portion of the survey was focused on the relationship between aspects of a social play cultural model and mental well-being, utilizing Seligman's (2011) PERMA model as a basis for measuring well-being. According to this model, there are 5 distinct categories under which an individual's well-being can be actualized and maintained: *Positive emotions, Engagement, Relationships, Meaning,* and *Accomplishments.* Research has demonstrated a positive relationship between aspects of the PERMA model and physical health, as well as in life satisfaction (Kern et al. 2015). The PERMA model has also been shown to be a stronger predictor of an individual's level of psychological distress than previously proposed models (Forgeard et al. 2011). Each aspect of the PERMA model was tested within the Likert-scale proposition segment of our survey, with particular focus on the *emic*-derived "nodes" of the social play cultural model.

6.2.1.1. Positive Emotions

Results from the survey (*N*=22) demonstrated that OSRS players experience a greater degree of positive emotions when engaging in aspects of the social play cultural model. 86.4% (19/22) of respondents indicated that they feel happier when playing OSRS with friends, substantiating our earlier claim that players experience higher affect when utilizing a shared cultural conception of social play. Conversely, 54.6% (12/22) respondents indicated that they *do not* feel happier when playing the game by themselves, mirroring our finding that solo play is more oriented towards efficiency and periods of low affect. Similarly, 86.4% (19/22) of respondents stated that sharing their in-game achievements with others makes them feel good, with players able to substantiate their achievements through the approval of others. These responses suggest that there could be a strong positive relationship between *Positive emotions* and social play on OSRS, and likewise that there could be a moderately negative relationship

with solo play and positive affect. Prior research has suggested that spending quality time with friends and loved ones is a way to maintain positive emotions (Kok et al. 2013), and similarly to how gaming can provide a "training grounds" for failure (Snodgrass et al. 2020), it appears that gaming within a social mindset provides a proximal "third place" for creating social capital and experiencing positive affect, all while in one's preferred environment.

6.2.1.2. Engagement

Seligman's (2011) category of *Engagement* is primarily concerned with one's ability to be immersed within an activity, describing it as akin to "being one with the music" and engrossed in what they're doing. This concept is similar to that of Csikszentmihalyi's (1989) "flow," where an individual experiences a loss of consciousness and becomes completely absorbed in an activity. 77.3% (17/22) of respondents indicated that they feel more focused on the game and "in the moment" when playing with their friends, hinting that a social play mindset may result in a higher degree of engagement for players. 77.3% (17/22) of respondents also indicated that OSRS is an engaging game, which contributes to how much they enjoy it. OSRS players could also be deriving a strong sense of engagement simply from the mechanics of the game, with this subconscious state being augmented and more likely to occur in the presence of friends or clan-mates.

Interestingly, 81.8% (18/22) respondents indicated that they enjoyed the game more because of how AFK and relaxing it is, characterized by low-intensity solo content in-game, which suggests that playing within an individualistic mindset could also bring some degree of *Engagement* to players. Bonaiuto et al. (2016) posit that a strong sense of *Engagement* can be obtained through participating in favored leisure activities, where one "loses track of time" when doing them, which appears to be the case for both solo- and socially oriented OSRS players.

Future research on OSRS and MMORPG-style games should address the idea of the "flow" state, and the degree to which players achieve it when by themselves or with others. Our research suggests that there is a positive relationship between *engagement* and a cultural model of social play, substantiating a positive relationship between the model and well-being overall.

6.2.1.3. Relationships

Relationships, according to Seligman, consists of the positive and meaningful interactions that people have with their family, friends, partners, and members of their communities. In the case of OSRS players, these relationships are primarily friendships created through the game environment, as well as members of their clans and communities on Discord and Twitch. Overwhelmingly, respondents indicated (90.9%, 20/22) that the friendships they've made through OSRS are important to them, suggesting that players (particularly those utilizing a social play cognitive model) attribute significant meaning to their online relationships. Likewise, 68.2% (15/22) of respondents indicated that the friendships they've made through OSRS make them feel fulfilled, substantiating the importance of the role of these online relationships. In fact, 81.8% of respondents stated that they wouldn't play OSRS as much as they do without the friendships that they've made, suggesting that these social relationships are a primary motivator behind playing the game.

Social connections, according to my research, appear to be both a primary motivator and a significant source of meaning and social capital for OSRS players. The final question of the survey was particularly supportive of this claim, with 77.3% of respondents indicating that being social online is just as fulfilling as being social offline, suggesting that OSRS players ascribe similar levels of importance to online relationships as they do to ones in the real world. This lends some validity to my hypothesis that online social outlets act as veritable "third places"

where individuals can enjoy themselves in a relaxing, playful, and accessible environment, just as they would at a cafe, a bar, or a gym. The world of Gielinor and offline "third places" effectively serve the same function socially and provide users with a comfortable environment to socialize with like-minded people and enjoy their leisure time. Operating within a social play cultural model would allow individuals to develop similarly meaningful relationships online, which could be particularly important for those who experience low levels of social fulfillment in their offline, everyday lives. This claim is supported by the previous research conducted by Kowert, Domahidi, and Quandt (2014).

6.2.1.4. Meaning

Within the PERMA model, *Meaning* is defined as the need to feel valued and part of something greater than one's self. Simply put, this is one's ability to feel that there is a purpose in life, allowing individuals to focus on the things that truly matter (Seligman 2011). The slight majority of respondents (59.1%) indicated that OSRS feels like more than just a game to them, hinting that players could be ascribing a greater degree of meaning to the game environment. At face value, OSRS is a medieval-fantasy video game where players create powerful characters and embark on dangerous journeys to achieve virtual glory. My research has suggested, however, that players on average derive a strong sense of community and achievement from the activity, which could be grounds to characterize the game as greater than the sum of its parts. For example, 77.2% of respondents indicated that OSRS is an important aspect of their lives, which can be reinterpreted as players ascribing a great deal of meaning to it. According to this data, OSRS appears to provide a moderate degree of meaning and purpose for its players, arguably providing a less intense form of well-being for its participants when compared with other aspects of the PERMA model.

6.2.1.5. Accomplishments / Achievements

Accomplishments or *Achievements* within the PERMA model are described as the ability for an individual to work towards their goals, mastering what they do in the process. According to Seligman (2012), *Achievements* correlate with one's ability to feel pride in themselves, which helps to foster a stronger sense of well-being. This aspect of the model is particularly pervasive within OSRS, as the game contains a myriad of achievements to complete, with players able to master skills, acquire powerful items and abilities, and overcome seemingly impossible challenges. Players have access to several systems in-game to measure their achievements, including *Combat Achievements* and the *Achievement Diaries*, as well as the global High-Scores page where they can compare themselves to the rest of the player-base. A significant portion of the game's identity is founded upon creating goals and setting out to accomplish them (i.e., "grinding") and these in-game systems allow players to clearly measure, as well as demonstrate to others, their achievements. In fact, 81.8% of respondents indicated that they enjoy creating goals and achieving them in-game, alluding to the importance that players ascribe to collecting accomplishments in the world of Gielinor.

As previously mentioned, 86.4% of respondents stated that sharing their in-game achievements with others made them feel good, suggesting that players derive a sense of pride and accomplishment from their in-game success. Interestingly, all but one of the respondents (95.5%) stated that they get a sense of accomplishment from what they've done on OSRS, which strongly supports the idea that achievements in-game provide players with a veritable (albeit subconscious) sense of well-being. Back in our interviews, FreshPrincess mentioned the time where her and fellow respondent Situals were standing in a bank with their high-level gear equipped, and she recalled others being envious of the high-level gear that their characters were

wearing. Demonstration of achievement is especially strong for OSRS players, with each player able to "show off" what they've done through their skills or items acquired. With this in mind, *Achievements* appear to be particularly important to players on OSRS and utilizing a social play mindset allows them to showcase what they've accomplished and receive praise from others, reinforcing the sense of pride they experience when completing their goals.

6.3. PERMA and Cultural Consensus Analysis

Table 7 displays the aggregate consensus data collected from our 33 Likert-scale responses. Surprisingly, a principal factor analysis of the dataset reveals that the Eigenratio for the first to second factors is 2.181, suggesting that there is significant enough difference in our survey responses that respondents could be drawing upon two distinct sources of cultural knowledge to answer the prompts. In other words, the Eigenratio indicates that there is not enough consensus within our respondents to classify the answers provided as "shared knowledge."[9] When considered alongside the results of our pile-sorting exercise, it would appear that OSRS players are alternating between their use of solo-play and social-play cognitive models, likely dependent on situational factors in-game, which helps to explain the variance in responses.

For example, players cannot reasonably expect to be continuously socially connected during their play sessions due to the varying schedules and "real lives" of other players. In this situation, players may more heavily utilize the solo-play cognitive model of efficiently acquiring experience points, learning more about the game world, and collecting individual accomplishments. On the other hand, when their friends are online, players may choose to

[9] Eigenvalues are simply the amount of variance explained by a particular factor, and often these are standardized so that the total amount of variance is equal to the total number of variables. Eigenratios are the ratio between the Eigenvalues of the first and second factors. (Dengah et al. 2021)

socialize to make their grinds “more fun” or “more bearable,” or complete collaborative activities that they otherwise couldn’t do. In this situation, players can experience high affect and create lasting memories with social others, reinforcing the importance of their social play in the process, subconsciously motivating them to continue participating within behavior that aligns with the model of social play.

Table 8 displays the competency scores for each individual respondent of the survey, indicating their degree of understanding of the primary cultural model on a scale of -1 to 1. One respondent stands out as a particularly strong “cultural insider” (Iron Kngs) in relation to a cognitive model of social play, with a competency score of 0.733. This individual most strongly embodies and enacts portions of the model, and as a result would be a favorable contact in the result of future research on this topic. Several other respondents obtained a competency score above 0.500 and would similarly be favorable to further investigate the concept of social play.

CHAPTER 7: CONCLUSION

My research suggests that each of the aspects of the PERMA model is present within the cultural model of social play on OSRS developed within my sample population, and several of the categories strongly support the claim that these players derive a positive sense of well-being from the game environment. However, there was not sufficient evidence to suggest that our respondents were utilizing well-being traits learned in the virtual world in their real world "IRL" lives (see Snodgrass et al. 2020). On average, the respondents of this project are ascribing significant meaning to their leisurely play and view the environment similarly to their offline, real-world lives, lending evidence to the claim that virtual worlds constitute veritable "third places" where participants can develop and maintain relationships, feel more positively about themselves and their place in the world, and relax in comfort.

I would like to suggest that MMORPG-style video games like OSRS, particularly when played within a social play mindset, have the potential to provide significant sources of well-being and happiness for their participants by allowing them to experience a social environment safely and on their own terms. This concept is particularly important in light of the Covid-19 pandemic and changes to available social environments; the socially oriented participants of this project were utilizing their online spaces in order to foster a sense of well-being in the absence of real-world "third places." 68.2% of respondents indicated that they socialized more online as a result of the Covid-19 pandemic, and 59.1% indicated that they currently socialize more online as a result. This leads me to believe that virtual worlds and online social spaces, at least for OSRS and MMORPG players, may begin to be valued as more important outlets for social interaction and acquisition of well-being attributes, paving the way for research on what I would call the "online social migration." Once seen as a simple leisure activity, Old School Runescape

seemingly has the potential to provide a significant source of well-being and happiness for its users, particularly those who play socially.

REFERENCES

Arifianto, Muhammad and Iqbal Izzudin. 2021. Students' Acceptance of Discord as an Alternative Online Learning Media. *International Journal of Emerging Technology in Learning 16*.

Bell, Kirsten. 2009. 'If it almost kills you that means it's working!' Cultural models of chemotherapy expressed in a cancer support group. *Social Science Medicine 68*(1).

Bellefeuille, Darrik and Hannah McCoy. 2021. SVIC Spotlight Film: Discord: A Modern Voice Service for a Modern Problem. *Spectrum 10*(1).

Bennardo, Giovanni and Victor C. De Munck. 2014. Cultural Models: Genesis, Methods, and Xperiences. *Oxford University Press*, New York, NY.

Bilir, Tanla E. 2009. Real Economics in Virtual Worlds: A Massively Multiplayer Online Game Case Study: Runescape. Georgia Institute of Technology, Atlanta, GA. Master's Thesis.

Boellstorff, Tom et al. 2012. Ethnography and Virtual Worlds. *Princeton University Press,* Princeton, NJ.

Bonaiuto, Marino et al. 2016. Optimal Experience and Personal Growth: Flow and the Consolidation of Place Identity. *Frontiers in Psychology 7*: 1654.

Bourdieu, Pierre. 1985. The forms of capital. In Handbook of Theory and Research for the Sociology of Education, ed. JG Richardson. New York: Greenwood: 241-58

Cacho, Jorge Fonseca. 2020. Using Discord to Improve Student Communication, Engagement, and Performance. *UNLV Best Teaching Practices Expo.* 95.

Chak, Katherine and Louis Leung. 2004. Shyness and Locus of Control as Predictors of Internet Addiction and Internet Use. *Cyberpsychology, Behavior and Social Networking 7*(5): 559-570.

Charmaz, Kathy and Richard G. Mitchell. 2001. Grounded Theory in Ethnography in *Handbook of Ethnography. Sage Publications,* Thousand Oaks, CA.

Crowe, Nic and Simon Bradford. 2006. "Hanging out in Runescape": Identity, Work and Leisure in the Virtual Playground. *Children's Geographies 4*(3): 331-346.

Csikszentmihalyi, M. And J. LeFevre. 1989. Optimal experience in work and leisure. *Journal of Personality and Social Psychology 56*(5): 815-822.

D'Andrade, Roy G. 1995. The Development of Cognitive Anthropology. *Cambridge University Press*, Cambridge, UK.

D'Andrade, Roy G. 2006. Commentary on Searle's 'Social ontology: Some basic principles': Culture and institutions. *Anthropological Theory 6*(1): 30-39.

De Munck, Victor C. And Giovanni Bennardo. 2019. Disciplining Culture: A sociocognitive approach. *Current Anthropology 60*(2).

Dengah, Francois H.J., Jeffrey G. Snodgrass, Evan Polzer, and William Cody Nixon. 2020. Systematic Methods for Analyzing Culture, a Practical Guide. *Routledge,* Oxford, UK.

De Wit, J., A. van der Kraan, and J. Theeuwes. 2020. Live streams on Twitch help viewers cope with difficult periods in life. *Frontiers in Psychology 11*.

Dressler, William W. 1994. Cross cultural differences and social influences, in *Social Support and Cardiovascular Disease*. Plenum Publishing, New York, NY.

Dressler, William W. 2017. Culture and the Individual: Theory and Method of Cultural Consonance. *Routledge Publishing*, Oxford, UK.

Dressler, William W., Mauro C. Balieiro, and José E. dos Santos. 2018. What You Know, What You Do, and How You Feel: Cultural Competence, Cultural Consonance, and Psychological Distress. *Frontiers in Psychology 8:* 2355.

Forgeard, Marie et al. 2011. Doing the Right Thing: Measuring Well-Being for Public Policy. *International Journal of Well-Being 1*(1).

Geertz, Clifford. 1973. The Interpretation of Cultures. *Basic Books*, New York, NY.

Gheț ău, Cosmin. 2021. Voice Communication Usage Among Video Game Players and Its Effects on Users Perceived Anonymity. *Journal of Media Research 14*(1).

Glaser, B. And A. Strauss. 1967. The Discovery of Grounded Theory: Strategies for Qualitative Research. *Sociology Press,* Mill Valley, CA.

Goodenough, Ward H. 1981. Culture, language, and society. *Benjamin / Cummings Publications,* San Francisco, CA.

Goodman, Fallon et al. 2017. Measuring well-being: A comparison of subjective well-being and PERMA. *The Journal of Positive Psychology 13*(4): 321-332.

Granic, Isabela, Adam Lobel, and Rutger C.M.E. Engels. 2014. The benefits of playing video games. *American Psychologist 69*(1): 69-78.

Greitemeyer, Tobias and Dirk O. Mügge. 2014. Video Games Do Affect Social Outcomes: A Meta-Analytic Review of the Effects of Violent and Prosocial Video Game Play. *Personality and Social Psychology Bulletin 40*(5): 578-589.

Halberstam, Jack and Judith Halberstam. 1998. Female Masculinity. *Duke University Press,* Durham, NC.

Heng, Shupeng, Huanfang Zhao, and Minghui Wang. 2021. In-game Social Interaction and Gaming Disorder: A Perspective from Online Social Capital. *Frontiers in Psychiatry 11*.

Jhee, Elijah. 2020. It's called Discord, but the instant messaging app has actually done more uniting during COVID-19 pandemic. *The Accolade*, Fullerton, CA. Web Article.

Jones, Christian M. et al. 2014. Gaming well: links between videogames and flourishing mental health. *Frontiers in Psychology 5*.

Kern, Margaret L. et al. 2015. A multidimensional approach to measuring well-being in students: Application of the PERMA framework. *The Journal of Positive Psychology 10*(3): 262-271.

Ko, Chih-Hung et al. 2014. Evaluation of the diagnostic criteria of Internet gaming disorder in the DSM-5 among young adults in Taiwan. *Journal of Psychiatric Research 57*.

Kok, Bethany E. et al. 2013. How positive emotions build physical health: perceived positive social connections account for the upward spiral between positive emotions and vagal tone. *Psychological Science 24*(7): 1123-1132.

Kovess-Masfety, Vivianne et al. 2016. Is time spent playing video games associated with mental health, cognitive and social skills in young children? *Social Psychiatry and Epidemiology 51*(3): 349-357.

Kowal, Magdalena et al. 2021. Gaming Your Mental Health: A Narrative Review on Mitigating Symptoms of Depression and Anxiety Using Commercial Video Games. *JMIR Serious Games 16*(9).

Kowert, Rachel, Emese Domahidi, and Thorsten Quandt. 2014. The Relationship Between Online Video Game Involvement and Gaming-Related Friendships Among Emotionally Sensitive Individuals. *Cyberpsychology, Behavior, and Social Networking 17*(7).

Lakoff, George. 2002. Moral politics: How liberals and conservatives think. *University of Chicago Press,* Chicago, IL.

Lakoff, George. 2004. Don't Think of an Elephant!: Know Your Values and Frame the Debate - The Essential Guide for Progressives. *Chelsea Green Publishing*, Hartford, VT.

Layard, Richard. 2006. Happiness and Public Policy: A Challenge to the Profession. *The Economic Journal 116*(510): C24-C33.

Liu, Ming and Wei Peng. 2009. Cognitive and Psychological Predictors of the Negative Outcomes Associated with Playing MMOGs (Massively Multiplayer Online Games). *Computers in Human Behavior 25*: 1306-1311.

Mathews, Gordon and Carolina Izquierdo. 2009. Pursuits of Happiness: Well-Being in Anthropological Perspective. *Berghahn Books*, New York, NY.

Michon, Frédéric et al. 2019. Post-learning Hippocampal Replay Selectively Reinforces Spatial Memory for Highly Rewarded Locations. *Current Biology 29*: 1436-1444.

Oetting, Eugene R., Joseph F. Donnermeyer and Jerry L. Deffenbacher. 1998. Primary Socialization Theory: The Influence of the Community on Drug Use and Deviance. *Substance Use and Misuse 33*(8).

Oldenburg, Ray. 1999. The Great Good Place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community. *Hachette Books*, New York, NY.

Peng, Wei and Ming Liu. 2010. Online Gaming Dependency: A Preliminary Study in China. *Cyberpsychology, Behavior and Social Networking 13*(3).

Robe, Isaac. 2018. Inescapably Social: Dimensions of Self Construction in the Virtual Social World of Runescape. East Tennessee State University, Johnson City, TN. Master's Thesis.

Romney, A. Kimball, Susan C. Weller and William H. Batchelder. 1986. Culture as Consensus: A Theory of Culture and Informant Accuracy. *American Anthropologist 88*(2): 313-338.

Ryan, Gery W. and H. Russell Bernard. 2003. Techniques to Identify Themes. *Field Methods 15*(1): 85-109.

Scheper-Hughes, Nancy. 1995. The Primacy of the Ethical: Propositions for a Militant Anthropology. *Current Anthropology 36*(3): 409-440.

Schwartz, David. 2021. Using Discord to Facilitate Student Engagement. *UNLV Best Teaching Practices Expo*. 122.

Seligman, Martin. 2011. *Flourish: A visionary new understanding of happiness and well-being.* Free Press, New York, NY.

Seligman, Martin. 2018. PERMA and the building blocks of well-being. *The Journal of Positive Psychology 13*(4): 333-335.

Snodgrass, Jeffrey G., Francois H.J. Dengah, and Michael G. Lacy. 2014. Online gaming involvement and its positive and negative consequences: A cognitive anthropological

"cultural consensus" approach to psychiatric measurement and assessment. *Computers In Human Behavior 66*(1).

Snodgrass, Jeffrey G. et al. 2018. Social genomics of healthy and disordered internet gaming. *American Journal of Human Biology 30*(3).

Snodgrass, Jeffrey G. et al. 2019. Positive Mental Well-Being and Immune Transcriptional Profiles in Highly Involved Videogame Players. *Brain Behavior and Immunity 82*.

Snodgrass, Jeffrey G. et al. 2020. An Iterative Approach to Qualitative Data Analysis: Using Theme, Cultural Models, and Content Analyses to Discover and Confirm a Grounded Theory of How Gaming Inculcates Resilience. *Field Methods 32*(4).

Snodgrass, Jeffrey G. et al. 2021. Indian Gaming Zones as Oppositional Subculture: A Norm Incongruity "Cultural Dissonance" Approach to Internet Gaming Pleasure and Distress. *Current Anthropology 62*(6).

Steinkuehler, Constance A. And Dmitri Williams. 2006. Where Everybody Knows Your (Screen) Name: Online Games as "Third Places". *Journal of Computer-Mediated Communication 11*(4).

Stephen, Bijan. 2020. This is Twitch's moment. *The Verge*, New York, NY. Web Article.

Taylor, T.L. 2018. Watch Me Play: Twitch and the Rise of Game Live Streaming. Princeton University Press, Princeton, NJ.

U.N. Department of Economic and Social Affairs. 2020. *Everyone Included: Social Impact of Covid-19*. Web Article.

Weller, Susan C. 2007. Cultural Consensus Theory: Applications and Frequently Asked Questions. *Field Methods 19*(4).

Woodcock, Jamie and Mark R. Johnson. 2017. Gamification: What it is, and how to fight it. *The Sociological Review 66*(3).

Yang, Michael. 2020. Shutdown: The Coronavirus: Beloved old school game sees boom in numbers during coronavirus quarantine. *Pavement Pieces*, New York, NY. Web Article.

APPENDIX 1: TABLES AND FIGURES

TABLE 1: Motivations to Play OSRS (*Visual Anthropac – Free Lists)*

Item	Frequency (%)	Average Rank	Salience
Social Aspect	69.2	3.78	0.374
Nostalgia	53.8	2.71	0.349
Open Ended Game	46.2	3.50	0.259
Community	23.1	3.33	0.149
Dopamine	15.4	4.00	0.079
Friends	15.4	1.50	0.138
Grindy	15.4	3.50	0.073
Point and Click	7.7	4.00	0.038
PKing	7.7	1.00	0.077
Game Economy	7.7	1.00	0.077
Not an FPS game	7.7	5.00	0.026
MMO	7.7	4.00	0.044
Not Toxic	7.7	2.00	0.066
Teaching Others	7.7	5.00	0.026
Tick System	7.7	2.00	0.064
Turn Based Combat	7.7	4.00	0.019
Progression Style	7.7	1.00	0.077
Relive Childhood	7.7	5.00	0.015
Streaming	7.7	4.00	0.038
Want to Max	7.7	1.00	0.077

TABLE 2: Emotions Experienced During Solo Play (*Visual Anthropac – Free Lists)*

Item	Frequency (%)	Average Rank	Salience
Bored / Boring	69.2	3.67	0,265
Don't Play Alone	30.8	3.25	0.162
Focused	30.8	2.75	0.188
Grinding	30.8	2.00	0.231
Lonely	23.1	1.67	0.196
Not Fun	23.1	3.67	0.092
Learning	15.4	3.00	0.077
Sucks	15.4	2.50	0.108
Relaxed	15.4	3.00	0.077
Sad	7.7	1.00	0.077
Raiding	7.7	1.00	0.077
Watching Streams	7.7	1.00	0.077
Weird	7.7	3.00	0.038
Skilling	7.7	2.00	0.062
Stuck in One Spot	7.7	5.00	0.015
Slow	7.7	3.00	0.038
Don't Want to Play	7.7	3.00	0.038
Escape from IRL	7.7	1.00	0.077
Don't need Others	7.7	3.00	0.061
Questing	7.7	4.00	0.031
Less Engaging	7.7	3.00	0.038

TABLE 3: Items Related to Group / Social Play In OSRS *(Visual Anthropac – Free Lists)*

Item	Frequency (%)	Average Rank	Salience
Having Fun	61.5	2.25	0.471
Exciting	38.5	2.60	0.267
Social Aspect	38.5	4.40	0.137
Friendship	30.8	3.25	0.183
Helping Others	30.8	4.25	0.096
Relaxed	23.1	4.00	0.108
Part of a Clan	15.4	1.50	0.135
Happy	15.4	3.00	0.103
Bearable	15.4	5.00	0.044
Motivated	15.4	2.00	0.115
Engaging	15.4	3.00	0.083
Challenging	15.4	2.50	0.100
Sharing Achievement	15.4	5.00	0.031
Listening to Music	7.7	2.00	0.064
Supported	7.7	2.00	0.062
Nervous	7.7	5.00	0.015
Not Alone	7.7	1.00	0.077
Anxious	7.7	5.00	0.015
Annoying	7.7	4.00	0.031
Laughing	7.7	3.00	0.038
High Energy	7.7	2.00	0.062

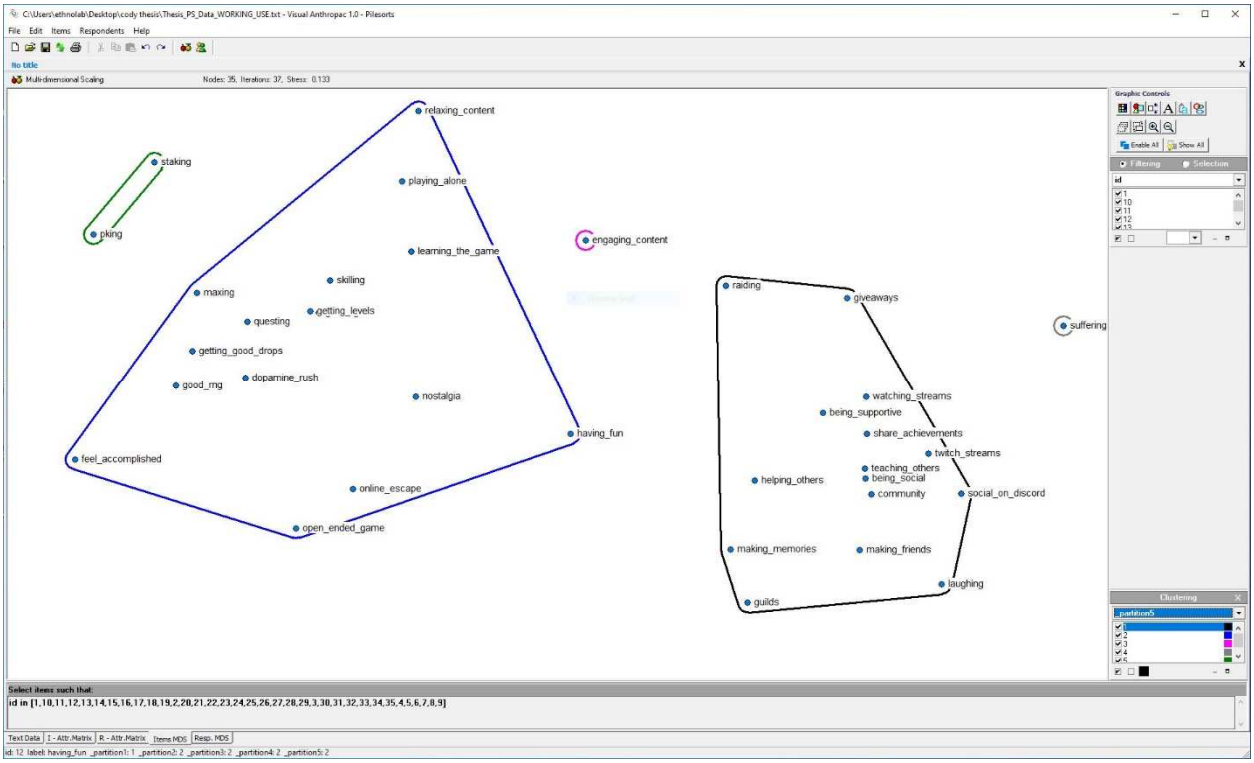
TABLE 4: Emotions Experienced During Group Play Memories *(Visual Anthropac – Free Lists)*

Item	Frequency (%)	Average Rank	Salience
Friendship	46.2	2.83	0.290
Happiness	38.5	2.80	0.247
Having Fun	30.8	2.75	0.205
Memorable	23.1	3.67	0.104
Raiding	15.4	4.00	0.062
Excited	15.4	3.50	0.085
Learning the Game	15.4	2.50	0.096
Teaching Others	15.4	2.50	0.100
Stressful	15.4	4.50	0.056
Superior	7.7	4.00	0.031
Supported	7.7	4.00	0.031
Very Funny	7.7	2.00	0.062
Sharing Achievement	7.7	5.00	0.015
Sociable	7.7	4.00	0.031
Relieved	7.7	4.00	0.031
Suffered Together	7.7	6.00	0.013
Nervous	7.7	2.00	0.064
Love	7.7	1.00	0.077
Content	7.7	5.00	0.026
Charity	7.7	1.00	0.077
Comfortable	7.7	4.00	0.038

TABLE 5: Changes During Covid Pandemic *(Visual Anthropac – Free Lists)*

Item	Frequency (%)	Average Rank	Salience
Less Social IRL	76.9	3.30	0.440
More Social Online	53.8	3.86	0.272
Social Confidence	38.5	3.40	0.245
Discord Usage	30.8	4.00	0.132
Seek New Friends	23.1	6.67	0.054
Online Communities	23.1	2.00	0.187
Sad	15.4	2.50	0.123
School Focused	15.4	1.50	0.143
Not Much Change	15.4	3.50	0.099
Time to Myself	7.7	3.00	0.055
Grind Games	7.7	1.00	0.077
Therapeutic	7.7	1.00	0.077
Work from Home	7.7	1.00	0.077
Forced to Socialize	7.7	4.00	0.038
Stuck at Home	7.7	4.00	0.031
Tighter Social Circle	7.7	5.00	0.026
Motivated to Play	7.7	3.00	0.051
Not Working	7.7	2.00	0.066
Give Back to Others	7.7	3.00	0.046
More Perspective	7.7	6.00	0.022
Good Mental Health	7.7	6.00	0.022

FIGURE 1: Unconstrained Pile Sort Exercise Results: Multidimensional Scaling and Clusters *(UCINet)*



Item Labels:

Being Social (1), Nostalgia (2), Open-ended Game (3), Community (4), Dopamine Rush (5), Good RNG (6), Grinding (7), Maxing (8), Teaching Others (9), Feeling Accomplished (10), Engaging Content (11), Having Fun (12), Making Friends (13), Guilds (14), Helping Others (15), Watching Streams (16), Socializing on Discord (17), Sharing Achievements (18), Relaxing content (19), Playing Alone (20), Getting Good Drops (21), Being Supportive (22), Getting Levels (23), Raiding (24), Learning the Game (25), Making Memories (26), Laughing (27), Suffering Together (28), Giveaways (29), Online Escape (30), Questing (31), Skilling (32), Staking (33), PKing (34), Twitch Streams (35)

TABLE 6: Pile Sort Exercise: Competency Scores and Consensus Analysis *(UCINet)*

Respondent	Competence
TerrorPoes	0.798
StoneOfJasss	0.581
Stukovia	0.165
Soba	0.863
Situals	0.911
Bingls	-0.434
Juoppokeke	0.342
MoonFe	0.166
CoolName123	0.687

Eigenvalue: 3.382 EigenRatio: 18.179

Your data exhibit strong fit to the consensus model, supporting an assertion that, despite individual differences, all respondents in the sample belong to a single culture with respect to this domain.

TABLE 7: Likert-Scale Prompts: Respondent Agreement Matrix and Factor Analysis

Agreement among respondents

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		Terror Poes	Kittym ouse1	Nstalg iaJnky	Casian ge	Pangui nix	redsty xx	StoneO fJasss	Stukov ia	brassi ca_one	sob a	killed covid	situal s	jjaaac cckk96	bingls	TummyH urts	Juoppo ekeke	Gortro n	Moon F e	ironth ejewel	CoolNa me123	Iron K ngs	Leila kabell
1	TerrorPoes	1	0.053	0.167	0.242	-0.098	0.015	0.053	-0.061	0.053	0.167	0.167	-0.023	0.129	0.167	0.129	-0.023	0.242	-0.023	0.205	-0.061	0.053	0.053
2	Kittymouse1	0.053	1	-0.023	-0.174	0.394	0.356	0.091	0.129	0.242	-0.061	0.167	0.318	-0.023	0.356	0.242	0.053	0.205	0.242	0.053	0.053	0.621	0.242
3	NstalgiaJnky	0.167	-0.023	1	0.394	-0.250	0.053	0.015	-0.136	-0.023	0.205	0.129	-0.023	0.053	-0.023	-0.023	-0.061	0.280	-0.098	0.167	0.091	-0.098	-0.061
4	Casiange	0.242	-0.174	0.394	1	-0.136	-0.098	0.015	-0.061	-0.023	0.053	0.167	-0.061	0.167	0.053	0.015	0.015	0.356	-0.023	0.015	-0.098	-0.061	0.015
5	Panguinix	-0.098	0.394	-0.250	-0.136	1	0.318	0.129	0.356	0.129	0.053	0.242	0.356	0.015	0.242	0.167	0.129	0.091	0.280	-0.061	0.015	0.470	0.545
6	redstyxx	0.015	0.356	0.053	-0.098	0.318	1	0.091	0.015	0.205	0.091	0.129	0.394	-0.061	0.242	0.205	0.167	0.091	0.205	0.091	0.091	0.545	0.280
7	StoneOfJasss	0.053	0.091	0.015	0.015	0.129	0.091	1	0.129	0.205	-0.023	0.091	0.053	0.205	0.242	0.280	0.053	0.091	0.205	-0.023	0.015	0.129	0.242
8	Stukovia	-0.061	0.129	-0.136	-0.061	0.356	0.015	0.129	1	0.091	-0.023	0.053	0.129	0.053	0.053	0.242	0.053	0.015	0.129	-0.174	-0.023	0.242	0.242
9	brassica_one	0.053	0.242	-0.023	-0.023	0.129	0.205	0.205	0.091	1	0.167	0.242	0.508	0.205	0.280	0.356	0.167	0.091	0.242	0.167	0.205	0.280	0.280
10	sob a	0.167	-0.061	0.205	0.053	0.053	0.091	-0.023	-0.023	0.167	1	0.280	0.091	0.432	0.242	0.091	-0.023	0.318	0.167	0.091	0.129	0.015	0.091
11	killedcovid	0.167	0.167	0.129	0.167	0.242	0.129	0.091	0.053	0.242	0.280	1	0.167	0.318	0.280	0.432	0.091	0.318	0.242	0.053	0.053	0.280	0.318
12	situals	-0.023	0.318	-0.023	-0.061	0.356	0.394	0.053	0.129	0.508	0.091	0.167	1	0.205	0.167	0.356	0.091	0.167	0.167	0.167	0.242	0.356	0.280
13	jjaaaccckk96	0.129	-0.023	0.053	0.167	0.015	-0.061	0.205	0.053	0.205	0.432	0.318	0.205	1	0.280	0.356	-0.023	0.280	0.167	0.053	0.129	0.091	0.015
14	bingls	0.167	0.356	-0.023	0.053	0.242	0.242	0.242	0.053	0.280	0.242	0.280	0.167	0.280	1	0.356	0.053	0.280	0.280	-0.023	0.129	0.432	0.242
15	TummyHurts	0.129	0.242	-0.023	0.015	0.167	0.205	0.280	0.242	0.356	0.091	0.432	0.356	0.356	0.356	1	0.129	0.167	0.205	-0.023	0.091	0.318	0.280
16	Juoppoekeke	-0.023	0.053	-0.061	0.015	0.129	0.167	0.053	0.053	0.167	-0.023	0.091	0.091	-0.023	0.053	0.129	1	-0.023	0.129	0.053	-0.061	0.167	-0.061
17	Gortron	0.242	0.205	0.280	0.356	0.091	0.091	0.091	0.015	0.091	0.318	0.318	0.167	0.280	0.280	0.167	-0.023	1	-0.098	0.091	0.053	0.167	0.242
18	Moon Fe	-0.023	0.242	-0.098	-0.023	0.280	0.205	0.205	0.129	0.242	0.167	0.242	0.167	0.167	0.280	0.205	0.129	-0.098	1	-0.061	0.015	0.356	0.242
19	ironthejewel	0.205	0.053	0.167	0.015	-0.061	0.091	-0.023	-0.174	0.167	0.091	0.053	0.167	0.053	-0.023	-0.023	0.053	0.091	-0.061	1	0.205	0.015	-0.061
20	CoolName123	-0.061	0.053	0.091	-0.098	0.015	0.091	0.015	-0.023	0.205	0.129	0.053	0.242	0.129	0.129	0.091	-0.061	0.053	0.015	0.205	1	0.091	0.053
21	Iron Kngs	0.053	0.621	-0.098	-0.061	0.470	0.545	0.129	0.242	0.280	0.015	0.280	0.356	0.091	0.432	0.318	0.167	0.167	0.356	0.015	0.091	1	0.432
22	Leila kabell	0.053	0.242	-0.061	0.015	0.545	0.280	0.242	0.242	0.280	0.091	0.318	0.280	0.015	0.242	0.280	-0.061	0.242	0.242	-0.061	0.053	0.432	1

22 rows, 22 columns, 1 levels.

No. of negative competencies: 2

Largest Eigenvalue: 3.826

2nd Largest Eigenvalue: 1.754

Ratio of largest to next: 2.181

The weak eigenratio indicates lack of fit to the consensus model – most likely, your respondents are drawn from a mix of two cultures.

(Jeff – Here do you mean the reader might rather see the cultural answer key? I think so too, however I wanted to include the factor analysis and eigenvalue / eigenratio output from this matrix, could just briefly discuss these results back where I reference them)

TABLE 8: Likert Scale Prompts: Individual Respondent Competency Scores

Respondent	Competence
TerrorPoes	0.119
Kittymouse1	0.552
NstalgiaJnky	-0.027
Casiange	-0.005
Panguinix	0.555
Redstyxx	0.494
StoneOfJasss	0.293
Stukovia	0.266
Brassica_one	0.513
Sob a	0.238
Killedcovid	0.487
Situals	0.554
Jjaaaaccckk96	0.307
Bingls	0.560
TummyHurts	0.564
Juoppoekeke	0.161
Gortron	0.321
Moon Fe	0.431
Ironthejewel	0.065
CoolName123	0.172
Iron Kngs	0.733
Leila Kabell	0.567

APPENDIX 2: SURVEY PROMPTS

For the following questions, select the answer 1 - 5 that corresponds with how you feel about the given prompt. 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

1. Old School Runescape (OSRS) is an important aspect of my life.
2. The friendships I've made through OSRS are important to me.
3. Discord is a crucial way for me to stay connected to my online friends.
4. OSRS feels like more than just a game to me.
5. Playing OSRS can feel like a chore sometimes.
6. OSRS is an engaging game, which makes it more enjoyable.
7. OSRS is an AFK-able and relaxing game, which makes it more enjoyable.
8. I feel more focused on the game and "in the moment" when playing with friends on OSRS.
9. I get a sense of accomplishment from what I've done on OSRS.
10. I feel happier when I'm playing OSRS with my friends.
11. I feel happier when I'm playing OSRS by myself.
12. Sharing my in-game achievements with others makes me feel good.
13. I enjoy teaching others content within the game.
14. I enjoy creating goals and achieving them in OSRS.
15. I feel fulfilled because of my experience on OSRS.
16. Being part of a clan makes the game more enjoyable.
17. It's fun to show off my gear and achievements in OSRS.
18. It's important to feel supported by my clanmates and other online friends.
19. OSRS provides an escape from my offline life.
20. Playing OSRS by myself is a better experience.
21. I watch streams often while playing OSRS.
22. I learn in-game content from others by watching them do it on stream.
23. Getting a good drop on OSRS is better when you're in a group.
24. The friendships I've made through OSRS make me feel fulfilled.
25. Being social on OSRS, Discord, and Twitch helps me not to burn out on the game.

26. I wouldn't play OSRS as much as I do without the friendships I've made.
27. Discord is an important aspect of my social life on OSRS.
28. Twitch is an important aspect of my social life on OSRS.
29. Twitch introduced me to new communities and friend groups in-game.
30. When I am playing OSRS, I am usually socializing in Discord as well.
31. I socialized more online as a result of the COVID-19 pandemic.
32. I currently socialize more online (than I did before) as a result of the COVID-19 pandemic.
33. Being social online is just as fulfilling as being social offline.

CULTURAL ANSWER KEY for QUESTIONNAIRE PROMPTS

Question	Average Answer (1-5)
1	4
2	5
3	5
4	5
5	5
6	4
7	5
8	5
9	5
10	5
11	2
12	5
13	5
14	5
15	4
16	5
17	5
18	5
19	5
20	2
21	5
22	5
23	5
24	4
25	4
26	5
27	5

28	4
29	5
30	5
31	5
32	5
33	5