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AVATAR IDENTIFICATION IN PROBLEMATIC GAMING: AN INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

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Approval of Thesis

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Abstract

Video games are becoming ever more sophisticated, immersive and prevalent throughout society, and research into the impact of problematic gaming (PG; or gaming disorder) is nascent. The theory of avatar identification, where a player merges their identity with a game character, provides a promising model to understand the phenomenon of PG in avatar-based games. This study used Interpretative Phenomenological Analysis to explore how five participants with lived experiences of PG related to their in-game avatars. Analysis of interviews yielded three superordinate themes. In the first theme, participants describe how particular games became safe escapes from real-world stressors. The second theme documents the strong social identity factors that motivated participants to game to extremes. The final theme relates what helped participants manage or quit their gaming. These findings are discussed in relation to relevant literature and how they may influence professional practice and future research directions.

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Chapter I: Introduction

The global video game industry is booming. It generated an estimated revenue of US \$334 billion in 2021, nearly tripling since 2017 (Statista, 2023). While gaming can be a source of enjoyment and positive social interaction for many (Halbrook et al., 2019), in the past decade, the American Psychological Association (APA) and World Health Organization (WHO) have recognized problematic video gaming (PG) as a potential health concern (APA, 2018; WHO, 2020). Much research and public attention has followed. Problematic gaming happens when a person plays video games to the point of significant harm to their life. With video game technology's increasing convenience, acceptance in youth social culture, and virtual immersion, the risk of problematic gaming will likely rise. Within role-playing video games, avatars are playable, often customizable, virtual characters. In this study, I explored the role of avatar identification in problematic gaming.

In my review of the literature, I summarized video gaming, gaming culture, and gamer identity. I then examined recent studies into risk factors, preventative measures, support strategies, and identity factors of problematic gaming. I highlighted the potential impact the COVID-19 pandemic lockdowns have had on vulnerable individuals. Throughout the review, I wove in my history of problematic gaming (PG) to illustrate and reflect on the literature.

In the past decade, public health organisations have begun responding to the harms of problematic gaming. I explored how the current definitions of internet gaming disorder and gaming disorder, used throughout much of the literature, may not fit many people's experience of PG or differentiate them from healthy gamers (Deleuze et al., 2017; Starcevic et al., 2020; Stehman, 2020). Ongoing research can illuminate ways of understanding the unique challenges of problem gamers (Deleuze et al., 2017). PG can be a coping method for real-world stressors (Stevens et al., 2021; von der Heiden et al., 2019), co-occurring with social and mental health challenges (Grajewski & Dragan, 2020; Green et al., 2020; von der Heiden et al., 2019). PG can significantly impact people's mental, physical and social wellbeing.

Virtual avatars played a key role in this study. Avatars which represent real-life aspirations and needs can become a means of escape for some (Sioni et al., 2017), as those struggling with PG often heavily invest in their characters to the detriment of their own lives (Barbera & Haselager, 2020; Stavropoulos et al., 2019). Understanding the meaning behind individuals' unique player-avatar relationships may guide developing therapeutic and organizational PG support initiatives.

My study applied Interpretive Phenomenological Analysis (IPA) methodology to explore the lived experiences of five previous problem gamers. According to IPA methodology, I endeavoured to create a rich, detailed account of participants' relationships with their game avatars and the meaning they attribute to them (Hefferon & Gil-Rodriguez, 2011; Pietkiewicz & Smith, 2014; Noon, 2018; Smith & Nizza, 2021). I took a reflexive approach, bracketing my own experiences while using my interpretations as a researcher to draw a nuanced picture of the phenomenon (Amos, 2016; Pietkiewicz & Smith, 2014; Smith & Nizza, 2021; Thomas, 2020). While dramatically increasing in the past decade, research into PG is only beginning. The purpose of this study was to advance qualitative insight into PG for gamers, health professionals, counsellors, and academics.

Research Questions

In this study, I sought to answer the primary question: How do those with lived experience of problematic gaming interpret their relationship with their chosen avatar(s)? Additionally, I explored these three sub-questions:

- a. How did the relationship between their real-life and virtual identities change over time?
- b. How might understanding a client's player-avatar bond help counsellors support individuals struggling with PG?
- c. What has helped those with a history of problematic gaming move forward?

Researcher Approach

I use the word "interpret" in my research question deliberately in place of "describe." This difference follows Martin Heidegger's interpretive philosophy of phenomenology in contrast to his former mentor Edmund Husserl's descriptive version (Reiners, 2012). Heidegger posited that you cannot separate the person from their experience, the subject from the object, and that all knowledge is interpretive and non-neutral (Amos, 2016; Burns & Peacock, 2019; Horrigan-Kelly et al., 2016). By using this term, I intentionally sought to understand my participants' interpretations and meaning-making of their lived experiences. In doing so, I entered into *double hermeneutics*, interpreting my experience of my participants' interpretations of their experiences (Pietkiewicz & Smith, 2014). I explored this stance in depth in Chapter III.

I believe that each person's experience of the world is unique and subjective. The mystery of our existence is ever beyond our understanding (Smythe & Spence, 2020). Social constructivism holds that identity and knowledge are contextual; we shape ourselves and are shaped through our relationships with family, community, and culture (Collins, 2018). I believe that increased understanding and awareness can lead to a greater availability of choice and control in our lives going forward. In undertaking this literature review and subsequent research proposal, I hoped to increase that opportunity for myself as a counsellor and other professionals.

My worldview shaped this literature review on problematic gaming and my approach to the following study. It represented a unique perspective on the landscape that should be considered among many others. I chose the articles and theoretical perspectives, interpreting them through a lens of my: lived experience of problematic gaming; cultural standpoint as a cisgender, heterosexual white male with a secure socio-economic upbringing; counselling training in a Canadian graduate program; academic background in the arts; five years work experience supporting those with addictive behaviours to change their lives; and the cultural narratives and

messages I grew up within. Based on my own experiences of PG, my bias lay towards caution and suspicions of video games' potential influence on our mental, emotional, and physical health and social connections. It is likely prevalent throughout this paper.

I may fall into the category of Canadians who have struggled with problematic addictive behavioural issues and overestimate their prevalence in the general population (Konkolÿ Thege et al., 2015a). My lived experience made me an insider researcher (Smith & Nizza, 2021). As recommended for IPA research in preparation for the research interviews, I bracketed my opinions and beliefs to embrace the openness necessary to understand another's experience (Pietkiewicz & Smith, 2014). However, I also endeavoured to explore perspectives in the literature that differed from mine. I hoped that this combination of research literature, personal experience, and curiosity will underpin an insightful and helpful research study on PG.

Chapter II: Literature Review

This literature review explores current academic research on problematic gaming. I completed the first draft in the fall of 2020. Since, I have updated it with emerging literature and explored new areas of inquiry that came up during my thesis work. Throughout, I have chosen articles based on their recency, applicability to my research focus, and academic influence on other literature.

This review has been an evolving process, where my initial review led to me delving into more specific areas within problematic gaming, such as avatar identification. I focused on articles from 2011 onwards to keep the information relevant, with higher priority given the more recent ones. Digital gaming technology is advancing rapidly, and more recent literature will have a better understanding of its current trends. Some literature, such as Bailey's 2005 article on identity in addiction, provide seminal philosophical contributions to the field, which merits their inclusion. Other older texts speak to a specific topic that has likely remained unchanged, such as Fernández-Vara's 2009 description of the adventure video game genre.

In a few places, I used non-academic sources to cite gaming statistics, definitions, or other non-academic information. Otherwise, I used Athabasca's online research library and Google Scholar to search for terms relating to problematic gaming (e.g. "Gaming Disorder", "Internet Gaming Disorder", "gaming addiction"), addiction, identity, gamer culture, and other related terms. I excluded articles that were not peer-reviewed or did not present new information or ideas to the field. To localize the research, I prioritized Canadian articles and those from similar cultures, such as the US and the UK. I also used studies based in other cultures, including notes of potential cultural differences. I attempted to include significant ideological trends alongside what became my focus, avatar identification.

Most studies on problematic gaming have used the American Psychological Association's "internet gaming disorder" (2018; Stehmann, 2020) or the World Health Organization's "gaming disorder" (2021). While I will discuss issues with the accuracy of their criteria, I

included many studies with both as they represent the largest and most relevant body of literature. When citing specific articles throughout the review, I referred to which criteria set they used.

I included articles on social, emotional, physical, and mental causes and consequences of gaming. I excluded articles on the neurological basis of addiction and problematic gaming.

There is extensive and important research into these areas, but I excluded them to allow more depth into the psychological and social determinants of problematic gaming. This is a limitation of the review; putting it together with research into neurology may give a fuller picture of problematic gaming, while this review attempts to define and contextualize avatar identification's role in problematic gaming.

An Overview of Video Games

Video games evolved through the second half of the twentieth century. The Internet Gaming Database (IGDB) lists their oldest recorded video game as Tennis for Two in 1958 (IGDB, n.d.a). Since then, video games have evolved from pixelated computer applications to flowing gameplay, epic landscapes, and instantaneous connections worldwide. Modern video games span a variety of platforms and are becoming more convenient, powerful, and immersive. It is possible to play games on a desktop or laptop, TV-attached console such as a PlayStation or Xbox, handheld consoles such as a Nintendo Switch, a tablet, or a phone. New virtual reality headgear can give users immersive 3-dimensional experiences that attempt to place the player more deeply into the physical reality of the game (Kaimara et al., 2021).

The data site Statista reported in 2023 that the year's estimated global video game revenue would reach nearly \$334 billion USD. They further estimate that growth will continue at slightly under 9% year-on-year, reaching \$466 billion USD by 2027 (Statista, 2023). In Canada in 2021, the gaming economy generated an estimated \$3.4 billion USD, up 20% since 2019 (ESAC, 2021). An estimated 53% of the Canadian population games regularly, according to a 2022 survey by the Entertainment Software Association of Canada (ESAC, 2022). The COVID-

19 global pandemic gave people more free time at home and reduced opportunities for other activities and social gatherings. The gaming industry has benefited from the lockdowns and restrictions, with more people logging more hours on video games (Wijman, 2020) and spending more money (Wijman, 2021).

Game Genre

Video games can be divided into general genres based on their content, style of play, goals, and relationships with other players. Different ways of defining and categorizing video game genres can lead to confusion and disagreement. Video game structures generally stabilized from various experimental topics into relatively set popular genres in the 1990s (Faisal & Peltoniemi, 2018). The IGDB lists 23 genres and 22 themes to search. In a 2020 study using IGDB, Alaa Qaffas compared sixteen common game genres based on the most successful games between 1986 and 2019. Adventure games were the most popular, followed by role-playing, shooter, platform, puzzle, and strategy.

Terms located within this thesis need further explication, including my background, and potential study participants, and gaming genres, including adventure games, role-playing games, massive multiplayer online role-playing games, sports games, and battle royale games. Adventure games follow a story-based plot set in a fictional world, where players solve puzzles to advance (Fernández-Vara, 2009). In role-playing games (RPGs), players use an avatar to explore an open fictional world, with a set of rules and consequences based on the actions they choose (Zagal & Deterding, 2018). By achieving quests, players' avatars gain new abilities and resources. Originally based on table-top RPGs, massive multiplayer online role-playing games (MMORPGs) use an open, quest-oriented world that brings together players worldwide to interact, trade, and play alongside each other (Zagal & Deterding, 2018). Sports games recreate live-action sports using real teams and players, where the player controls avatars of professional athletes (Qaffas, 2020). Battle royale games, which pit players against one another in a large arena, have become popular, with 41% of gamers stating they played them in a 2019 study by

Statista (2022). There are various other games, such as puzzles and strategy, yet I will not include these here as they less directly involve personalized avatars.

Qaffas (2020) found that successful games typically blend two or more game genres. For instance, when I played the soccer game *FIFA*'s "manager mode", it incorporated sports, strategy through squad-building, and adventure-style goals in cups and league competitions. *Skyrim*, an open-world Norse-inspired game, combines role-playing, adventure, and fighting. *Mass Effect* is a futuristic science fiction game involving plot-driven adventure, role-playing, and fighting. Finally, *World of Warcraft* is an MMORPG, set in a medieval fantasy world where players choose their race and side in a global conflict.

Avatars

Games have a spectrum of avatar choice and customization options within each genre. Adventure games typically feature an avatar that can be a set character, a choice of set characters, or a being (human, humanoid, or otherwise) that players can edit to their choice. For instance, *Mass Effect* requires gamers to play as Captain Sheppard, with a fixed persona and physical features but in-game plot choices. On the other end of the spectrum, *World of Warcraft* features 14 races based loosely on classic fantasy literature; players can choose a race, edit their physical features, and name them (Blizzard Entertainment, 2022). Throughout the game, they can acquire armour, weapons, and ride various animals. Players can switch between multiple avatars in different saves. Sports games incorporate multiple avatars into one scenario (Qaffas, 2020). Shooter games can have players inhabit named or unnamed soldiers. *Fortnite*, the most popular battle royale game, allows players to customize their avatar's "skins" by selecting different physical features, costumes, and a toolbox of actions such as dances. Overall, avatars range considerably in their degree of customization from game to game.

Integration with Popular Culture

Video games do not exist in a bubble. Video game culture weaves with other entertainment media. Successful fantasy books, films and television shows are often adapted

into video games like *The Lord of the Rings*, *Harry Potter*, and *Star Wars*. As a ten-year-old, I read the *Lord of the Rings* trilogy after seeing the first movie trailer, and then played the video games that followed each movie. More recently, *The Witcher* franchise now spans a book series, video game series, and television series. The direction is also increasingly reversed with highly popular games spawning book series and television adaptations. Among other recent examples, *World of Warcraft*, an MMORPG played on the computer and itself an offshoot of the game *Warcraft*, has generated numerous books and a 2016 blockbuster film adaptation. Recent high-budget films such as *Free Guy* and *Ready Player One* follow characters between the real world and sweeping, interactive virtual reality games. Since their inception, video games have become a significant new media genre that both pull from and influence other industries.

Video game characters, plots, and environments draw from history, mythology, and modern-day cultural influences. The award-winning turn-based strategy game series *Civilization*, which released its sixth rendition in 2016, allows a player to choose a historical culture to lead from ancient to modern times. It incorporates fundamental technological advancements, economics, trade, and military warfare. *Fortnite* incorporates the option to purchase avatars from pop culture. These avatars can span a broad spectrum, from football players such as England's Harry Kane and *Marvel* characters like *Iron Man. Marvel's* Thor portrays the historical links through time and culture: a game avatar based on a film franchise based on comic books based on ancient Norse mythology. *Apex* is a multiplayer online shooter. When a fifteen-year-old boy I worked with in 2021 described the avatars to me, they resembled a pantheon of mythic heroes, with detailed back stories, blood feuds, family ties, curses of fate, and unique abilities.

Other first-person shooter games such as *Call of Duty* incorporate both historically accurate and fictional warfare scenarios where players can embark on landmark missions.

Sports games use the licensed likenesses of real-world athletes. *The Sims* and *Animal Crossing*

focus on home-building, lifespan development, and community relations. Video games both draw from and reflect our lives, our relationships, and our desires.

Overall, video games span a wide spectrum of genres and platforms. Players can spend thousands of hours engrossed at home in richly-detailed, life-like virtual worlds as an avatar or carry on a gaming tradition dating back to 7th century India by playing a quick game of chess while waiting for the bus (Britannica, n.d.). Video games have become an integral part of many people's lives, providing entertainment and integrating with other popular media.

Gamer Identity

Gaming covers a wide swathe of genres, cultural elements, and platforms. People play games for entertainment, to connect with others, for distraction, for the challenge, and for the story (Hagström & Kaldo, 2014; von der Heiden et al., 2019). What, then, does it mean to be a "gamer"? Is everyone who plays video games, no matter how often or how seriously, considered a gamer? The Entertainment Software Association of Canada estimated that 53% of Canadians game regularly, based on a survey of those who had gamed in some form in the past four weeks (2022).

However, what differentiates someone who, for instance, has a weekly virtual solitaire foray from the leader of a *World of Warcraft* battle clan, investing hours a day into their virtual communities and character? Who is a gamer and, as with any label, who decides? As I will discuss at the end of this subsection, gamer identity is not one of my primary purposes with the literature review. However, it is applicable to understanding video game culture and I have chosen several recent articles to broadly define gamer identity.

The term *gamer* has been around as long as video games have, with the traditional stereotype consisting of young, white, heterosexual males (Grooten & Kowert, 2015; Howe et al., 2019). Additionally, the stereotypical gamer can be associated with certain genres of games, such as shooters, role-playing games, and retro games (Howe et al., 2019). However, these assumptions may not be accurate (Grooten & Kowert, 2015; Howe et al., 2019). Being a gamer

has developed from a niche group to more widespread throughout the general population (Grooten & Kowert, 2015).

The term *gamer* is a function of societal and cultural discourse, created both by those who consider themselves gamers and by those who don't (Grooten & Kowert, 2015; Howe et al., 2019). While it may seem straightforward to classify those who play any video game as a gamer, or those who play a lot, it's more complicated. While I played video games continually from an early age into my twenties, I never thought of myself as a serious gamer. I would at times play with friends, but these were friends I met through and knew best in other contexts, such as school and sports. I thought of gamers as those invested in online gaming communities, such as some of my friends were in *World of Warcraft* guilds.

This belief aligns with what some researchers have recognized as well. According to Howe and colleagues (2019), being a gamer means identifying with an in-group based fundamentally around gaming. "Just as everyone that exercises does not identify as an athlete, everyone that plays video games does not identify as a gamer" (Howe et al., 2019, p.4). According to a 2019 study by Howe and colleagues, self-described gamers: play a variety of games on different platforms, especially consoles; play more than other non-gamer players (also found by Kort-Butler, 2021); represent several cultural and ethnic backgrounds; and are more likely to be male.

A key element to describing oneself as a gamer is active involvement in gaming communities (Grooten & Kowert, 2015; Howe et al., 2019). These communities may interact through a combination of in-game communication, other online communication, and physical meetups. Players can join guilds and clans playing as their avatars, with social hierarchies, group goals, and in-game social identities. Gamers may be less involved in other social circles, and find their connections and communities in gaming (Kort-Butler, 2021).

The game genre significantly influences gamers' virtual self-identity, providing social meaning within gamer communities and the wider world (Jung, 2020). In a 2020 study of

nearly 1,800 video-game-playing Korean adults, Jung found that gamers create in-game social communities that can represent microcosms of society. These communities have their own inbuilt social values, characteristics, rules, and hierarchies (Grooten & Kowert, 2015). Gamers often immerse themselves in YouTube and Twitch game-related media (Jung, 2020), while discussions can involve game-related and non-game-related topics (Jung, 2020). Gamer communities can at times stand against general media opinion, especially regarding game-related topics. For instance, sensationalized stories about gaming addiction can create defiance to and ridicule of social perception within gaming communities (Carter et al., 2020; Jung, 2020). For gamers, video games become much more than an isolated activity, instead weaving into their social lives, worldviews, and sense of personal identity.

Online communities can provide positive and negative contexts for social interaction. As with other online communication forums, gaming chat features provide a layer of anonymity. This can make homophobia, racist, sexist, and other inappropriate language commonplace within them (Gray, 2018). That anonymity can also be a way for people to escape stigmatising social identities (Gray, 2018). Gray (2018) studied "gaymers" of colour and their experiences of creating queer-friendly groups on Xbox Live. Participants expressed challenges of not fitting into the idealized gamer stereotype. Often following discrimination, they created private spaces to develop cohesion and connections within their groups, where they could redefine cultural identities which had been stigmatized in general gaming spaces (Gray, 2018). In this way, the flexibility and anonymity of gaming communities meant both negative experiences and opportunities for them.

Throughout this literature review, I will refer to identity as it relates to problematic gaming. With all it entails, being a gamer can represent a significant part of a player's personal and social identity (Grooten & Kowert, 2015; Jung, 2020). However, gamer identity specifically is not my primary focus when I speak about identity. At several points, I will be speculatively relating people's real-life identities to their avatars and preferred games; this may include gamer

identity, or it may not. Gamer identities may be significant to some of those with problematic gaming and may guide me in the interview and data analysis process.

Personal Concerns

Video games have become an integral part of many people's daily lives. Yet in the long history of human evolution, video games are a new, evolving phenomenon, and we are only beginning to understand how we interact with them. Video games are part of a wider technological advancement that provides continual new frontiers. For instance, artificial intelligence is increasingly becoming a part of daily life, business, academics, research, and communication. Its implications are unknown and unprecedented. Gaming companies have been using artificial intelligence in video game content creation for years and its use is likely to increase exponentially, creating more immersive, personalized, and interactive gaming experiences (Wu et al., 2023).

In his seminal 2005 book *Last Child in the Woods*, Richard Louv stresses the integral part nature plays in childhood development, from creativity to physical ability to relationship-building to self-confidence and trust in the world. While video games and digital media can reflect natural elements, they do so in a controlled and ultimately limited environment that does not incorporate a connection with the natural, physical world. Even with healthy gaming, I am concerned about what children and adults miss out on. Video games may represent a learning and community tool that prepares kids for a tech-infused world, but there is always a cost. They can only teach indirectly about the physical laws of nature, its causes, and consequences. I also believe they can give unrealistic senses of what it takes to achieve tasks: games are — to some degree of difficulty — set up to be won, their worlds tamed and conquered. When players fail or their avatar dies, they reset to a previous save. Knowledge and abilities are preset. This more general concern about gaming is my opinion and not my focus here. In the following sections, I will document my review into problematic video gaming as it relates to specific psychological health issues.

Medical Models of Problematic Gaming

A 2020 survey by the Entertainment Software Association of Canada estimated that 61% of the population plays video games (ESAC, 2020). The majority of people who play video games do so with no significant negative consequences (WHO, 2021). They typically game to socialize with friends, to relax, and for curiosity about the storyline (Starcevic et al., 2020). In this literature review, I will not focus on the average video game player, but rather those who have been negatively impacted by their gaming.

Global rates of problematic gaming seem difficult to measure. In a meta-analysis of 53 studies, Stevens et al. (2021) found a global GD prevalence between 1.96-3.05%, with a high level of variation. In a 2020 rapid scoping review of articles on IGD prevalence rates around the globe, Darvesh and colleagues found a wide range of rates, exemplified by 0.21-57.50% in general populations globally. Darvesh et al. (2020) concluded that up to that point there was not enough data to make any real conclusions on prevalence rates.

Data on problematic gaming in Canada is sparse, perhaps due to the challenging nature of determining prevalence, issues of terminology, and the recent emergence of the field of study. In a 2017 national survey of Canadian adults, 3.2% met the criteria for IGD (Sanders et al.). In two previous surveys of Canadian adults, in 2009 and 2010, 2.6% and 4.7% reported video games creating a problem in their lives (Konkolÿ Thege et al., 2015a). Taking a rough estimate of 3%, over one million Canadians may have struggled with PG in 2015. Since that time, the gaming industry has grown exponentially.

There is limited province-specific data. In the most recent study, Hébert-Ratté and colleagues found a 2.2% GD rate in French-speaking Quebec adolescents (2023). In the past decade, several studies have also been published on problem gaming rates for Ontario adolescents. A 2012 study of Ontario adolescents found that 9.4% reported symptoms consistent with now outdated fourth edition Diagnostic and Statistical Manual criteria (Turner et al.). A further study of the same population, using the Problem Video Game Playing (PVP) scale, found

that 1.2% met criteria for Severe PVP and 12.2% met High PVP (Faulkner et al., 2015). Based on 2011 student survey data, Shi and colleagues (2019) found that Toronto-based adolescents were almost twice as likely to game problematically compared with their non-urban peers via the PVP scale, with rates of 16.7 and 8.8% respectively. Using multiple search keywords, I found no other province-specific studies.

After reviewing the research, I can conclude that we need more information on rates of PG in Canada. Updated PG prevalence rates can better inform public policy and private organizations. If we know how many people are struggling and what populations are most at risk, we can more accurately assess how much help is needed.

The Disorder Model

In 2013, the fifth edition of the DSM-5 listed internet gaming disorder (IGD) as a "condition for further study" (APA, 2018, para. 2). It proposes nine symptom criteria: preoccupation, withdrawal, tolerance, inability to reduce playing, giving up other activities, continuing despite problems, deception of others, relief of negative moods through gaming, and risk to other life areas (APA, 2018). A diagnosis would require someone to experience at least five of these within the previous year (APA, 2018).

With gambling disorder, the only classified behavioural addiction, there was not sufficient evidence at the time to designate internet gaming alongside it (APA, 2018). This call for research has prompted numerous studies in the past ten years, from classifying specific IGD criteria in individuals to prevalence to treatment possibilities. The DSM-5 became the most-cited reference in problematic gaming research (Stehmann, 2020), marking its importance in spurring scientific inquiry into the phenomenon.

In 2018, the WHO followed suit by adding gaming disorder (GD) to its 11th Revision of the International Classification of Diseases (ICD-11; 2021). They stated that expert consensus and a review of the evidence led them to classify GD officially. The WHO differentiated GD into online and offline playing, either of which must contain the same three symptoms over a year:

- "impaired control over gaming (e.g., onset, frequency, intensity, duration, termination, context);
- 2. "increasing priority given to gaming to the extent that gaming takes precedence over other life interests and daily activities; and
- 3. "continuation or escalation of gaming despite the occurrence of negative consequences.

 The behaviour pattern is of sufficient severity to result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning" (WHO, 2021, para. 2).

According to Kuss et al. (2017a), diagnosis classifications can help get funding for research, inform practitioners, create regulatory bodies for games, break stigma, and support those struggling to get insurance funding. Some people may struggle to receive support from family and professionals without a diagnosis (Park et al., 2021). For others, a pathologizing identity might be problematic (Avdi, 2005). Avdi urges "the process... of decentring the dominant diagnostic narrative and the subsequent widening of available explanatory frames" (p. 507). Importantly, both the APA and the WHO specify that gaming must be significant enough to impair a person's life and note the individual's lack of control over their gaming habits and ability to stop. However, their definitions may not be accurate.

Contentious Criteria. According to the literature I explored, researchers and clinicians may benefit from a deeper understanding of the lived experience of problematic gamers. For example, the DSM-5 criteria for identifying IGD, widely used in recent studies, may be invalid or misleading (Deleuze et al., 2017; Starcevic et al., 2020; Stehmann, 2020). Critics suggest that rather than using symptomatology associated with substance abuse disorders, such as the DSM-5 does, it may be more useful for client-facing health professionals to distinguish the unique characteristics and themes in problematic gaming (Deleuze et al., 2017). One notable difference between the terms Internet Gaming Disorder and Gaming Disorder is that use of the

term internet in IGD holds that players can use offline games in a problematic way (Kuss et al., 2017a). As seen in the debate sparked by Kuss et al.'s (2017a) article, researchers have many disagreements about the proposed diagnostic criteria (e.g. Kardefelt-Winther et al., 2017; Krossbakken et al., 2017; Kuss et al., 2017b; Quandt, 2017; Starcevic, 2017). It is an ongoing topic of debate.

Deleuze and colleagues (2017) found no significant differences between problematic gaming and recreational gamers who played frequently through IGD standards, with DSM factors such as time devoted to games muddying the waters. Seay and Kraut (2007) agree that hours played is not an accurate measure for PG. Deleuze et al. (2017) consider the DSM criteria to borrow too heavily from substance-based addiction measures.

A survey of gamers themselves found that the criteria they generally believed constituted problematic gaming overlapped somewhat but not fully with the DSM's IGD criteria (Stevens et al., 2021). For instance, they noted that a lack of control and compulsivity could indicate addiction (Stevens et al., 2021). Starcevic et al. (2020) studied those who sought treatment for problematic gaming in comparison to regular gamers who did not seek treatment. They found that neither the DSM's IGD nor the WHO's GD criteria distinguished the treatment-seeking group (Starcevic et al., 2020). Between the two, the IGD criteria encompassed a broader population, and the GD criteria was more specific and somewhat better at marking problematic gaming (Starcevic et al., 2020).

However, both sets of criteria failed to account for the most telling factor in the study.

The important distinguishing question Starcevic and colleagues found was *why* people gamed -accomplishment and coping with personal issues differentiated treatment-seeking gamers
(2020). When a technological application such as gaming meets a real-life unmet need, it may
become problematic (Kardefelt-Winther, 2014). Conversely, others argue that motivational
factors may be misleading. King et al. (2020a) and Kowalik et al. (2024) make a strong

argument for impaired control being the strongest differential between problematic and healthy gaming.

I do not provide an in-depth suggestion for problematic gaming diagnosis criteria here, as it is not my focus. However, in the next section I will define problematic gaming and my rationale for using it. Throughout this study, I will reference studies that have used IGD and GD criteria, as these are the most common and influential parameters to date. Taken cautiously, trends and themes that have emerged with these existing definitions can inform and influence future research.

Harms

Researchers have begun investigating the harmful effects of problematic gaming on individuals. Doing so can better inform diagnostic criteria as well as treatment and preventative measures to protect vulnerable gamers. In a study of 72 problematic gamers, Delfabbro and colleagues (2021) found that problematic gamers suffered harms mostly related to physical and mental health, such as reduced exercise, regret, and social isolation. It also affected their work performance and punctuality (Delfabbro et al., 2021). Much of the harms may be accounted for by impaired impulse control in gaming habits (Kowalik et al., 2024). Problems with any or all of sleep, hygiene, physical health, work, and social integration could significantly reduce a person's quality of life and put increased pressure on public services. Delfabbro et al. (2021) recommend public health initiatives to better educate the community on the potential harms of problematic gaming.

The risk of financial harm through PG, while seemingly low in 2020 (not in the top ten reported harms in Delfabbro and colleagues' 2021 study), may be increasing. While problem gambling is much more strongly associated with significant financial harms (Delfabbro et al., 2021), the overlap between internet gaming and gambling behaviour is increasing rapidly. The addition of paid gambling-style loot boxes means that more people, especially adolescents, are at risk of financial harms through games (Kristiansen & Severin, 2020; Zendle & Cairns, 2018;

Zendle & Cairns, 2019). Loot boxes are discussed more in the section on game design risk factors.

Escapism in Gaming

Escapism may be a key factor in defining problematic gaming. Kacsmarek and
Drazkowski (2014) found that playing video games with escapist motivations meant more game
time and a belief that the virtual world was equal to the real one. An escapist motivation may
draw people into gaming itself, or at least differentiate problematic gaming from other addictive
behaviours. In one study of midwest American university students, gamers showed much higher
escapist motivations than gamblers (Puiras et al., 2021). Hagström and Kaldo (2014) dug deeper
to define escapism in relation to gaming. Negative escapism may be a defining feature in many
instances of problematic gaming, where players use the game to avoid real-life problems
(Hagström & Kaldo, 2014). Negative escapism involves immersion to avoid reality, while
positive escapism involves seeking gameplay for its own merits; their study showed that those
using the game for negative escapism had significantly more PG struggles than those using it as
a positive escape (Hagström & Kaldo, 2014).

For my story of problematic gaming, explained in the coming pages, this rings true. I wanted to feel I could fight and *win*, that I could stand tall and unafraid in the world. My reason for playing was significant. Decreasing my gaming symptoms as a 20-year-old would have helped my mental health, but not addressed the needs and desires that drove me to devote thousands of hours to virtual avatars. In the survey by Stevens and colleagues, many gamers believed that problematic gaming was a symptom of some other real-world struggle (2021). Wei et al. (2019) called for "a more holistic approach ... in understanding young people's life experience" in relation to PG (p. 7).

A Definition of Problematic Gaming

Several terms exist in the recent literature: internet gaming disorder (Delfabbro et al., 2021), gaming disorder (Grajewski & Dragan, 2020), problem gaming (Stevens et al., 2021),

game addiction (Gong et al., 2020), obsessive online social gaming (Gong et al., 2021), and pathological gaming (Bussone et al., 2020), among others. There is not yet a general consensus on defining and determining what problematic gaming is (Griffiths et al., 2016; Kuss et al., 2017a). Indeed, 28 researchers collaborated to produce a direct contradiction to Petry et al.'s (2014) assertion that IGD had created a consensus (Griffiths et al., 2016).

Unless specifically citing other work, I will use the term problematic gaming (PG) throughout this document. A notable researcher in the field, Griffiths and their colleagues (2015) use problematic gaming as an umbrella term for the variety of definitions that currently exist. I also employ it in an attempt to sidestep the history of social stigma around addiction terminology (Bailey, 2005) and the trend towards medicalization and disorder models in counselling psychology (Strong et al., 2017), while retaining a sense of the urgency and impact in a person's life. Wherever possible, I will avoid terms such as treatment (which denotes medicalization) and recovery (associated with addiction). In Chapter III on methodology, I will use the WHO's GD symptom criteria for sampling selection. It may be slightly better at differentiating problematic from healthy gaming (Starcevic et al., 2020).

My Lived Experience

I came to this study for personal reasons: I struggled with problematic gaming throughout my adolescence and early twenties. At age 20, I spent 10-12 hours a day gaming, as I skipped university classes and withdrew from friends. The games I chose allowed me to express parts of myself that I could not in real life, to be successful where I had failed. I developed idealized self-identities through my virtual avatars. In the Fédération Internationale de Football Association (FIFA) franchises, you can play as any professional soccer team, controlling the players. As a passionate former soccer player in real life, I could manage and play a world class soccer team: scoring, defending, and, over the course of a campaign, winning esteemed international competitions. In the game *Skyrim*, I could be a rogue travelling fighter,

independent and powerful. If I failed in the game, I could simply load a previous save and start again.

While many people play games online with and against others, I played alone, so I was the only audience and judge of my exploits. In GD terms, I would fit the offline gaming category (WHO, 2021). My escape into the fantasy world of games wove in with depression, shame, and anxiety. On my worst days, I ate one meal a day, slept for ten or twelve hours, and lived in a small apartment which I did not clean. I dropped out of university. By that time, I could not adequately manage my life. While it had roots in other areas of my life, gaming became a vicious cycle: I gamed because I was unhappy, and the more I gamed, the more unhappy I became.

To heal, recover, and move forward, I had to leave those avatars and their safe, controllable world behind. I returned to them in times of stress, and struggled out again and again. Each time it became a little easier, a little clearer. My problematic gaming has been a deeply unhealthy habit, yet it was often fuelled by healthy traits gone astray, such as loyalty, hope and perseverance. In a way, it helped me get through a difficult time in my life. In many ways, I am training as a counsellor because of my struggle with problematic gaming and mental health. Reflecting on it, the ties are deep and complex: social, familial, and cultural. There is not enough space here to expand on each in detail. Therefore, I will focus mainly on how my sense of social identity influenced my gaming habits and choice of avatar to bracket my lived experiences in contrast to the data. Though my experience of PG is unique and may differ significantly from many others', I will use it to texture the literature presented, offering a real-life example of some of the theories and findings.

Risk Factors

People struggling with problematic gaming may have significant and distressing real-world challenges. Individual, interpersonal, and environmental risk factors can make people more vulnerable to PG.

Social Factors

Family factors play a key role in the development or prevention of problematic gaming in children and adolescents. Children with problematic gaming reported a lack of parental warmth and affection compared to their peers (Koc et al., 2020). In the group, which used IGD criteria, mothers more often reported being depressed during the early childhood years, having anxiety, and being the only limit setters for their kids (Koc et al., 2020). This shows that parental mental health and their support systems impact on children's potential to engage in problematic gaming. However, the study did not explore fathers' views, a noted limitation (Koc et al., 2020). The kids reported less parental involvement and family activities (Koc et al., 2020).

An Italian study by Marinaci and colleagues (2021) found problematic gaming associated with low levels of parental monitoring, low family functioning, and lack of social support.

Schneider et al. (2017) found that poorer relationships with parents can significantly increase problematic gaming tendencies and consequences. While researchers are just beginning to establish a connection between parental involvement and problematic gaming, inquiry into why this occurs is important as well.

Wei et al. (2019) reported that stressful life experiences, especially in childhood, may be a risk factor for online gaming addiction. This finding was mirrored by Grajewski and Dragan's 2020 study, using IGD criteria. Adverse childhood experiences played a significant role in problematic gaming development, with physical and emotional abuse and emotional neglect being the most important factors (Grajewski & Dragan, 2020).

People struggling with emotional, psychological, or social challenges may turn to games as a way to regulate or escape those negative experiences (Hagström & Kaldo, 2014).

Problematic gamers also report significantly lower self-esteem and self-concept than their peers (Green et al., 2020; von der Heiden et al., 2019). In high school in West Virginia, I felt socially accepted but risk-averse, too uncertain to take romantic steps, shying away from attention in groups. Salted with barbs from friends, I started to feel like a social failure. I was the "nice

Canadian." By then having moved over a dozen times throughout North America, I often felt a sense of displacement and transience. However, as the goalkeeper and one of the captains on the soccer field, I had a respected role and duty. There were rules and structure. I could be bold and courageous. When, at age 18, this disappeared, I began to struggle.

Those seeking to escape or distract themselves from their lives had more issues with gaming (von der Heiden et al., 2019). This finding contrasts with those who play video games to socialize and enjoy the storyline, which resulted in much healthier gaming (von der Heiden et al., 2019). In a large qualitative study on gamers' perspectives on problem gaming, some stated that the root of the problem lay outside of the virtual world (Stevens et al., 2021). The DSM-5 notes this possibility as well (APA, 2018). Excessive and dysfunctional gaming may only be the symptom of something else. After high school, I went to a large university far from friends and family. I did not make their soccer team. But in FIFA's manager mode, I could build and create a team around me. It became a way to return to a safe, known identity, and to prove myself. Even though it was fake, a collaboration between my imagination and the screen, it could feel real in the moment and flow of the game.

A lack of self-regulation can make a person more susceptible to PG (Grajewski & Dragan, 2020; Seay & Kraut, 2007). For those players who use video games to cope with real-world stressors, gaming can become a maladaptive self-regulation strategy (Grajewski & Dragan, 2020). Problematic gaming can use the structured achievements and security of the virtual world to restore feelings of well-being. However, game accomplishments do not impact the real world (excluding professional gamers), making gaming as a self-regulation strategy for negative feelings ultimately ineffective.

Psychological Correlates

Certain psychological conditions may make individuals more vulnerable to problematic gaming. Researchers have found correlations with several common mental health problems,

both as predictors of PG and potentially bi-directional comorbid disorders. For instance, anxiety and depression symptoms may significantly contribute to a person's vulnerability.

High anxiety is correlated with problematic video gaming habits (Burkauskas et al., 2022; Huang et al., 2022; Kim et al., 2022). Huang et al. (2022) found that anxiety was a predictor of IGD symptoms in Chinese school children. However, anxiety can show up in different forms and lead to different consequences. In a more targeted study, Kim and colleagues (2022) found that higher levels of anxiety paired with high levels of gaming predicted GD symptoms. They found that comorbid anxiety and GD formed a bidirectional relationship (Kim et al., 2022). More specifically, social anxiety may be a risk factor for IGD, especially depending on their preference for online or real-world interactions (Marino et al., 2020). Anxiety seems to have a significant correlation with PG, especially when paired with other risk factors, such as negative escapism. For example, someone plays to excess to escape distressing thoughts and feelings, which are seriously increased by their cognitive patterns of worry and intolerance of uncertainty (Roubichard et al., 2019). It could easily become a vicious cycle.

Similarly, depressive symptoms have a high correlation with problematic gaming (Burkauskas et al., 2022; Dang et al., 2024; di Fini et al., 2023; Orsolini et al., 2024; Sit et al., 2023). Interestingly, one study of Chinese undergraduate students found that depressive symptoms predicted IGD, but not the opposite way around (Dang et al., 2024). Conversely, Sit and colleagues (2023) demonstrated that IGD and depression can contribute to each other in Chinese adolescents. In exploring the bridge between the two, they discovered that negative escapism, decreased initiative in the real world, and feeling down-hearted played significant roles (Sit et al., 2023). With depressive symptoms including challenges of motivation and low self-worth (WHO, 2024), people may find it easier to derive a sense of purpose, community, and activity through gaming devices. During the height of my PG, I was also clinically diagnosed depressed and had little energy or initiative to leave my residence. For me, they played hand-in-

hand, with the more energy I put into the game meaning the less I had to try anything else. The less I tried anything else, the more I sought meaning and connection from games.

Other psychological correlates likely influence PG. For instance, in a 2023 Brazilian study of gaming disorder in adults, di Fini and colleagues found that symptoms of depression, somatization, personality disorders, dissociation, and ADHD all correlated moderately with IGD symptoms. Conscientiousness and quality of life seemed to be protective factors (di Fini et al., 2023). Another study found that overt symptoms of IGD in university students related to higher substance misuse, alongside anxiety and depression (Burkauskas et al., 2022). However, exploring all of the possible correlations is beyond the scope of this literature review; rather, it is important to know that a variety of other mental health struggles, especially anxiety and depression, can play a key role in the progression and maintenance of PG.

Additionally, new research looking into metacognitions about online gaming may play a significant role in mediating mental health conditions such as depression and anxiety (Dang et al., 2024; Marino et al., 2020). A positive metacognition about online gaming may be that it is a healthy stress relief while a negative metacognition could be the risks of online gaming (Spada & Caselli, 2017). In studies by Dang and colleagues (2024) on Chinese undergraduate students and Marino and colleagues (2020) on Italian youths, both found that negative metacognitions played a significant role in mediating the impact of mental health conditions on IGD symptoms. Therefore, correlated psychological factors such as those discussed above may make people especially vulnerable to PG, or not, depending on how they view gaming.

Game Design Risk Factors

The risk factors do not lie solely within the individual. Games can vary widely in their structure and intent for player engagement, from player-centered to exploitative. Researchers Zagal, Björk and Lewis proposed that game designers can employ "dark patterns" in the structure of their games to trick players into sacrificing their time and/or money to the game (2013, p. 2). Through dark patterns, games can entice players to play longer than expected to

gain in-game reward, part with money to advance their avatars or skip advertisements, or overinvest in the social capital of the game to the detriment of their real life (Zagal et al., 2013).

Games such as *World of Warcraft*, for example, can require many hours of grinding (mindlessly killing creatures for loot and experience) to gain levels, meet achievements, and prepare for dungeons. It also increasingly uses time-based measures to keep gamers coming back, such as achievements for doing daily and weekly quests. Another common time-based trick is to require certain actions at particular times of the day or week, meaning the player has to arrange their schedule around the game structure (Zagal et al., 2013). While individual game designers may seek to create player-centered games that entertain (Zagal et al., 2013), large gaming corporations are built to generate profit and using dark patterns for these motives can create further harm (Karagoel & Roberts, 2021). Gaming companies may financially benefit from problematic gaming behaviour. They may target vulnerable players' needs for identity and acceptance through social capital-based dark patterns or paying to upgrade avatars. Therefore, a discussion of problematic gaming must not only look at the individual and their environment, but also the game itself.

Monetization of gaming, the second dark pattern, is of increasing concern. The main technique is through loot boxes, where players can pay to gain a randomized set of upgrades of bonuses within the game, including avatar skins. Loot boxes are heavily linked to increased problem gambling behaviour (Brooks & Clark, 2018; Hing et al., 2022; Zendle & Cairns, 2018; Zendle & Cairns, 2019), as well as causing significantly increased financial harm on gamers (Carey et al., 2021). A worrying trend is the significant use of loot boxes in games played by adolescents, who would normally be legally protected from gambling. A study by Kristiansen and Severin found that adolescents who bought loot boxes in games were more likely to be at risk of problem gambling (2020). The presence of gambling-related techniques such as loot boxes can significantly increase the harm of problematic gaming through financial consequences.

Avatar Identification

Avatar identification represents a videogame player's relationship with their virtual avatar. Defined by van Looy and colleagues in their 2012 paper, the term has been picked up by other prominent PG researchers, such as Green et al. (2021), Lemenager et al. (2016), and Sioni et al. (2017). Van Looy and colleagues (2012) consider avatar identification as derived from three components: similarity identification, wishful identification, and embodied presence.

With similarity identification, they suggest that players are more likely to bond to an avatar that appears like themselves (van Looy et al., 2012). "Recognizing one's own traits, appearance, attitudes, beliefs, experiences, and behavior in a character, thus facilitates feeling close to it and vicariously participating in its experiences" (van Looy et al., 2012, p.203).

Conversely, dissimilarity can also hold attraction for some (van Looy et al., 2012). Players may also bond especially with an avatar who characterizes traits that players desire of themselves but do not have in the real world. van Looy et al. (2012) relate this phenomenon to wishful identification. They cite Higgins' (1987) theory of self-discrepancy, "which states that the enjoyment of wishful identification is grounded on the reduction of self-discrepancy for the time of media exposure" (van Looy et al., 2012). Players may feel more connected with their idealized selves when walking in their avatar's shoes.

Finally, players feel a sense of embodied presence through their game avatar in the virtual environment (van Looy et al., 2012). Van Looy and colleagues' (2012) study found that similarity identification, wishful identification, and embodied presence all contributed to users' motivation to play massive multiplayer online games. While avatar identification can be a positive enjoyment factor for those who play in a healthy fashion (Whang & Chang, 2004), it might represent problems for those vulnerable to PG.

Real-world problems may motivate some people to escape into a virtual avatar. Those vulnerable to or engaged in PG often show strong identification with their virtual avatar (Barbara & Haselager, 2020; Burleigh et al., 2017; Green et al., 2020; Green et al., 2021;

Lemenager et al., 2016; Liew et al., 2018). A virtual self, automatically made capable in its world by the game's plot and social structure, can serve as a vessel for those trying to escape experiences of shame, social anxiety, or depression (Burleigh et al, 2017.; Stavropoulos et al., 2019; Sioni et al., 2017). Lower self-esteem correlates with higher identification with a virtual avatar and more problematic gaming (Green et al., 2021; von der Heiden, 2019). Motives of body image can be especially powerful. For those feeling real-world shame or uncertainty around their physical appearance, seeking to identify with the avatar's physical presence (in comparison to emotional or social identity) seems to make a person especially vulnerable to strong player-avatar bonding (Stavropoulos et al., 2019). Over-identification with an avatar may become a gateway from regular gaming into PG.

Theories of Identity

Researchers have devoted significant study into identity work in addiction and problematic behaviours (e.g. Bailey, 2005; Cummins et al., 2020; Gong et al., 2021; Koski-Jännes, 2002; Rødner, 2005). I will examine some of that literature here considering how it may relate to avatar identification in PG. In particular, information technology (IT) identity presents a new theoretical construct in line with our developing relationships with technology (Carter & Grover, 2015) and may help us better define and understand PG (Gong et al., 2020).

Those struggling with addictive behaviours may suffer from social stigma and misunderstanding from others (Bailey, 2005). In a large meta-analysis, Montes and Pearson (2021) determined that identity may play an important role in problematic substance use. While I aim to differentiate PG from other problematic behaviour, similarities may exist here that can guide our knowledge and future research. Indeed, significant identity work may be a key part of some people's long-term recovery from problematic behaviours (Koski-Jännes, 2002). This change may involve "a more honest and authentic mode of being in the world" (Koski-Jännes, p. 200). In my alcohol and drug abuse work as a counsellor, I constantly see clients striving to change their personal and social identities: finding new ways to relate to themselves and to

others. For myself, I renegotiated my identity by pursuing passions, goals, and a social identity separate from soccer and gaming.

Carter and Grover (2015) introduced the concept of information technology (IT) identity, using a foundation of symbolic structural interactionism. IT represents any form of technology, such as phones, computers, video games, and social media, that someone uses to communicate information in a social context (Carter & Grover, 2015). Identity can cover a variety of social roles, from parenting to employment to cultural connections (Carter & Grover, 2015). Carter and Grover (2015) define IT identity as "the extent to which an individual views use of an IT as integral to his or her sense of self" (p.4). I appreciate that this definition is not focused on the length of time spent, but instead what that relationship means to the individual. IT identity relates to how technology has become an integral part of so many of these already established roles and relationships.

Carter and Grover (2015) examined the literature up to that point and defined three ways IT can enhance or complement established identities: as a determinant, medium, or consequent. IT can be a determinant of identity when it transforms how someone engages in a particular identity role, such as transitioning to home-based work (Carter & Grover, 2015). IT can be a medium of identity when it verifies a person's inherent individual identity through virtual self-presentation (Carter & Grover, 2015). Lastly, IT can be a consequent of identity when it develops or maintains a person's social identity within a culture or community (Carter & Grover, 2015). However, they argued that IT can also be more than complementary in terms of identity formation.

In positive IT identity, a piece of technology is integral to someone's self-concept, considered a part of "Me" versus what is "not Me" (Carter & Grover, 2015, p. 19). They posit that IT creates an expanded self, with greater capabilities than the original self and therefore, if then removed, make the person feel more limited in scope of being. As with other identities, "IT identity is inescapably both personal and social", contextualized by an individual's socio-cultural

location (Carter & Grover, 2015, p. 22). They suggest that people establish various IT identities linked to different software and hardware into a hierarchy based on their needs and preferences (Carter & Grover, 2015).

The more someone uses a technology, the more embedded an IT identity can become (Carter & Grover, 2015). Carter and Grover theorize that "the relative importance of an identity to the self may only become apparent when a person is prevented from enacting behavior in accord with the identity" (2015, p. 26). When considering the importance of avatar identification for an individual, it might be useful to consider who they are and how they feel about themselves if they are unable to access that avatar. They state that "computer self-efficacy, actualized rewards, and embeddedness will positively influence IT identity" (Carter & Grover, 2015, p. 37). Thus, the more someone games and feels rewarded through the game, the more important ingame identities can become to them. In terms of healthy versus unhealthy gaming, it may then become a question of their motivations and the strength of their other identities.

The potential strength of an IT identity varies person to person. IT identities can be stable to the degree that the technology itself is stable and accessible within a person's life (Carter & Grover, 2015). It can also relate to people's inherent self-efficacy with the given technology (Carter & Grover, 2015). Carter and Grover differentiate three dimensions of IT identity: relatedness, emotional energy, and dependence (2015). While they cite many examples of healthy IT identities in people's lives, problematic gaming may involve the negative impact of these three dimensions. With PG, an individual may create an IT identity through which they relate more strongly to a virtual world than the real world, devote excessive emotional energy into the game, and become dependent on it for their source of identity.

IT identity has significant similarities to avatar identification. For instance, Carter and Grover gave this example as to how IT identity can expand people's sense of self: "The overlapping boundaries between participants' personal resources and those of the IT effectively extended their self-concepts to include capabilities of their mobile devices" (2015, p. 21).

Overlapping boundaries created an extension of self. In terms of avatar identification, the same sentence would instead read: an IT identity extends the person's self-concept to significantly overlap with their avatar's resources and abilities.

Gong and colleagues built on Carter and Grover's work in two studies related to PG. They concluded that "IT identity played a key role in the formation of problematic online gaming" (Gong et al., 2020, p. 9). They suggested that gamers should intentionally limit their IT identity with regards to gaming (Gong et al., 2020). However, I believe it is the motivation for that identity that is the key; many gamers can hold strong IT identities that do not significantly impact their lives in a negative way. In further research, Gong and colleagues (2021) confirmed the validity of Carter and Grover's (2015) IT identity as a structure for examining online problematic gaming. They found that IT identity may be more important than social identity factors to the formation of obsessive online social gaming. Their study results demonstrated that IT identity can fully mediate the influence of social identity factors on online PG (Gong et al., 2021). Therefore, IT identity may be a key determinant of socially motivated PG. Research into IT identity's influence is just beginning, and may provide a way in to better understand the causes of PG.

Overlapping Identities

A gamers' ability to customize, choose, and evolve or advance their avatar can be a significant draw to a game (Barbera & Haselager, 2020). Barbera and Haselager's 2020 study involved problematic gamers who played MMORPGs, a large, specific population of gamers. I was not particularly drawn to MMORPGs; however, I associate strongly with many of the researchers' conclusions, meaning that their findings may be generalizable outside of MMORPG players. Burleigh et al. (2017) warn that adolescents and young people going through formative years of personal and social identity development may put themselves at greater risk of problematic gaming by devoting excessive time to avatar creation and customization. Young people may invest in virtual selves that serve as midway points between their real and ideal

selves, potentially leading to heavy investment in the virtual self over the needs and growth of real life (Barbera & Haselager, 2020). They might transition from experiencing their virtual avatar as separate to themselves to feeling they inhabit the virtual self and world (Barbera & Haselager, 2020).

Some researchers conclude that the virtual world can overlap with problematic gaming and even overlay the real one (Barbera & Haselager, 2020; Stavropoulos et al., 2019). My FIFA avatar, though unrealistic, drew on my deep ties of being a soccer player and part of a dynamic team environment, which was not reflected in my real life at the time. For problem gamers, virtual avatars such as my FIFA team can represent real-life goals and needs (Sioni et al., 2017). Mine was a strong emotional connection, a continuation of years of commitment as a soccer player. It would not have felt worth it but for my struggles with social anxiety and self-worth in the real world at that time. It felt like a life raft, yet it further disconnected me from the world.

In my imagination, I left myself behind on the couch to become those soccer players, that Skyrim warrior. Sioni et al.'s (2017) study of social phobia and IGD indicated that individuals with social anxiety can invest in a virtual avatar as a safe, idealized model of themselves. Deep investment in a virtual world and avatar may lead people to make real-life sacrifices for the game (Barbera & Haselager, 2020). I believed that even if I felt I was failing at the life I had set out for in the real world, while playing I could pretend I was succeeding and ignore reality. Carter and Grover (2015) propose that "having received material or emotional benefits from past feature use and/or enhanced use behaviors (as opposed to being motivated to achieve them) is likely to increase the strength of one's IT identity in relation to the target IT" (2015, p. 36). Even if the material and emotional benefits were not grounded in the real world, they still gave me a sense of accomplishment.

In the game worlds, there was a clear sense of linear progression without serious setbacks. They were built to be won. Paradoxically and predictably, the more energy and time I devoted to the game, immersing myself in it, the worse my life unravelled. "Thus, as avatar

identification increases, more psychological resources are invested to develop and maintain one's virtual self. This connection between personal self-worth and an avatar's accomplishments may, therefore, lead to excessive or problematic online gameplay" (Sioni et al., 2017, p. 14). Greater gaming intensity paired with escapist motivation may lead to greater avatar identification and PG (Barbera & Haselager, 2020; Seay & Kraut, 2007; Sioni et al., 2017).

Implications for Counselling

Overall, the relationship between gamer and avatar is an important factor in problematic gaming, yet we are only beginning to understand it. Why does a particular player choose a particular game and avatar? How does that relationship evolve over time? If this relationship may be a key factor in developing problematic gaming, what happens when problematic gaming decreases? If avatar character building is a lure into the game, what in the real world would be a lure out? For me, I changed environments, moving from Montreal to California, and reconnected with other latent parts of my identity, such as writing and the outdoors. I began to need my virtual selves less to feel connected and competent.

Problematic gaming can be transient in nature, with many people recovering or quitting without professional help (Konkolÿ Thege et al., 2015b). This may imply life stage or environment is important; it is an area I am curious about for my research. Those seeking help can feel misunderstood and unsupported by family due to stigma around problematic gaming not being a real issue (Park et al., 2021). Additionally, the study by Park and colleagues (2021) found that many participants who had sought help struggled to find it or felt the professional support they received did not fit their needs. Understanding how the gamer-avatar identity and relationship shifted for former problematic gamers may shed light on helping those struggling. Through this relationship, research could also reveal real-world needs delivered in the game. More research into avatar-player bonding for problem gamers could inform counselling strategies for PG.

Prevention and Support

There are emerging preventative and support options for PG. Some established substance abuse treatment and youth support organizations have opened their doors to problematic gamers. A quick Google search of Canadian options immediately brings up residential rehabilitation at Trafalgar Addiction Treatment Centres, focused therapy groups at Last Door, and Venture Academy programs for troubled teens. Founded in Washington state in 2009, reSTART offers treatment specifically for "Internet and Videogame addiction" (reSTART Life, 2019, para. 2). They use an outdoor setting to help clients reconnect with others, themselves, and the natural world. My healing involved a reconnection with creativity, the outdoors, and an active community. Though I sought psychotherapy, I did not address my gaming there. Like me, people struggling with PG often do not seek professional help for their gaming (Konkoly Thege et al., 2015b). Increased awareness and focus in the public media in recent years, along with the growth of the video game market's reach, may change this for the better. Those seeking support for PG suggested that services should use preventative measures, take a client-centred approach, and have a spectrum of support options (Park et al., 2021). Numerous potential protective measures and avenues for support in the recent academic literature can influence and expand available and developing therapeutic options.

Experiences of school connectedness and gratitude can moderate PG. As evidenced in a study by Wei et al. (2019) of 579 school children in China, the researchers noted adverse childhood experience to be a strong predictor of PG. This could be mitigated through school connectedness and experiences of gratitude (Wei et al., 2019). These researchers also found that school connectedness (defined using the Chinese version of the School Connectedness Questionnaire) made an "important bridge in the process of stressful life experience leading to online gaming addiction" (Wei et al., 2019, p. 7). General feelings of gratitude (using the Chinese version of the Gratitude Questionnaire) had a similar effect (Wei et al., 2019). In fact, to protect against PG, students needed only one of school connectedness or gratitude (Wei et al., 2019). A

potential limitation to these findings in a Canadian context is the cultural divide between Asian and Western cultures; however, through globalisation, this divide may be less present than in previous times. Perhaps within these two cultural frameworks school connectedness and gratitude may function somewhat differently. However, with that caveat in mind, this finding suggests separate approaches for school staff and parents versus counsellors: the first can seek to promote school connectedness, while the latter can support a perspective of gratitude, with each potentially effective in isolation.

Sioni et al. (2017) suggest increasing offline social interactions for those who use gaming to cope with social anxiety. Interpersonal networks may be key to protecting vulnerable young people from PG (Marinaci et al., 2021). In my early twenties, I found new friend groups and communities. There, I began to rebuild the sense of connectedness and purpose I longed for. For those struggling with body image, Barbera and Haselager (2020) suggest self-acceptance and restoration of a healthy physical self-concept. Gong and colleagues (2020) recommended people who have quit or significantly reduced their gaming to engage in other stimulating social and physical activities that can replace their need for negative escapism. They also suggest that families mitigate situations that cause emotional distress when someone quits gaming problematically, as they can act as triggers to resume it (Gong et al., 2020). More family activities and increased parental warmth and affection may support children at risk of PG (Koc et al., 2020).

Counsellors can play a pivotal role in supporting healthy social relationships and self-acceptance. Family therapists can support families struggling with problematic gaming in the home by promoting parent-child bonds. Schools and youth associations such as Venture Academy can promote healthy social interaction and mentorship. Parents can also be educated on setting limits that can help regulate gaming, reducing risk (Koc et al., 2020). Additionally, mental health support for parents of young children may prevent PG down the line (Koc et al., 2020).

In 2017, Li and colleagues conducted a randomized controlled trial on Mindfulness-Oriented Enhancement (MORE) for IGD. After eight weekly group sessions, participants in the MORE group showed significantly fewer IGD symptoms than those in the control at post-treatment and a 3-month follow-up (Li et al., 2017). The MORE approach sought to increase awareness of "automized video gaming behavior" through mindfulness techniques such as breathing (Li et al., 2017, p. 400). Poor self-regulation is linked with PG (Grajewski & Dragan, 2020; Seay & Kraut, 2007); Li et al. (2017) hypothesized that fostering self-regulation through MORE could reduce problem gamers' habits.

Similarly, a collaborative school- and family-based intervention program in Thailand was successful in helping kids improve their self-regulation and abstain from gaming if they chose (Apisitwasana et al., 2018). If PG is an escape from real-world stresses yet can also significantly impede a person's ability to cope in a healthy way, strategies such as MORE can act as a sort of damage limitation while offering more adaptive coping methods. Li and colleagues' stage I study offers psychology practitioners an evidence-based approach to PG support.

Increasing awareness of PG risks and consequences may help. Gamers expressed agreement with voluntary support programs for problematic gaming and increased overall awareness of risks, such as warning labels (Stevens et al., 2021). Wei et al. (2019) advocated for more family and community awareness of PG, especially related to stressful life experiences. Overall, video game players supported measures that increase awareness of PG and can support people in healthy decision-making (Stevens et al., 2021). Suggestions of in-game feedback loops to promote self-regulation were encouraged (Stevens et al., 2021). They considered it ultimately up to the individual to regulate their own gaming habits, with parents and the community teaching children how to game in a healthy way (Stevens et al., 2021).

The gaming industry is aware of the potential for avatar identification as a source of revenue. Unsurprisingly, market gaming research has investigated ways to increase the player-avatar bond to gain greater gamer loyalty (Christy et al., 2016; Moon et al., 2013; Teng, 2017;

Teng, 2019). The draw of avatar identification in popular role-playing games is clear. *Fortnite* is free-to-play and the creators make money from in-game purchases of skins and avatar items. Sports games franchises such as *FIFA*, *Madden*, and *NBA* allow players worldwide to compete as their favourite players and teams. It may be necessary for regulating bodies to provide warnings about the risks of PG as companies look to capitalize on avatar identification.

Discourse of Addiction and Gaming Communities

For counsellors working with this population, it may benefit them to understand discourses about addiction, mental health, and PG in the general public and within gaming communities. Gaming communities may offer an opportunity for and a barrier to increasing awareness of PG. As an alcohol and drug abuse support worker at Turning Point Recovery Society in Vancouver, BC, I went to upwards of fifty Alcoholics Anonymous and Narcotics Anonymous meetings with clients. There, I saw the impact on people when they were able to share a part of their identity that was otherwise typically dismissed, stigmatized, or misunderstood. As a twenty-year-old gamer, I did not know how to bring my struggles forward. Awareness of and support for PG within gaming communities may help alleviate potential stigma and feelings of helplessness for those struggling.

Young people and their parents were found to differ on what problematic gaming entailed (Koc et al., 2020). A 2020 Australian study by Carter et al. suggested that kids used the term "addictive" to refer to games as being extra fun and enticing, which differed significantly from responses provided by adults. PG and its similar terms likely have various meanings that do not fit the general cultural narrative within youth gaming communities. Extreme stories of PG in the media can create a sense of complacency and dismissal of fears by children (Carter et al., 2020).

Additionally, health professionals may be overly biased against new technologies due to focusing too heavily on risks of addiction (Ferguson, 2015). Older clinicians in a study showed more negativity towards video games, and less than 10% of the 109 health clinicians surveyed

described themselves as gamers (Ferguson, 2015). Counsellors may benefit from understanding their potential clients' interpretations of both popular culture references and the actual risks of PG. Park and colleagues' 2021 study of those seeking treatment found they thought they would connect more with professionals who understood gaming culture. Also, knowledge of gaming culture (such as *Fortnite* dances) may help counsellors bridge the gap to connect with children and adolescents who may not have the same awareness that their gaming habits are problematic.

Behavioural Addictions

The concept of behavioural addictions is relatively recent (Bailey, 2005). In 1986,

Durand Jacobs defined addiction as having two predisposing factors: constant "either hypo- or
hyper-arousal" and a sense of rejection in childhood. These two factors can lead someone to seek
relief through an intense sensation. "It is the striking contrast between their aversive, unhappy,
non-fulfilling resting state and its dramatic alleviation that creates such a novel, intense, and
well-remembered experience" (Jacobs, 1986, p. 21). The person can create a cycle of addiction
by more and more avoiding the initial unpleasant resting state (Jacobs, 1986). This can be
through substances, which can change the brain chemistry, or through other behaviours that
create particular states of mind.

Bailey (2005) argues that the classification of addiction is created within our cultural environment. It represents the shadow side of an individualist culture's idolisation of freedom as an ultimate goal: the person who cannot control their actions (Bailey, 2005). Impaired control is a defining characteristic of addictive behaviours generally (Goodman, 1990). It is a failure of the self to exercise control over one's desires and needs (Bailey, 2005). A recent quantitative study by Kowalik, Delfabbro and King (2024) showed that impaired control is significantly related to higher levels of harm for those who self-identified as having a problem with gaming. This included higher levels of financial harm, likely due to the increased use of gambling-style

monetized rewards within video games (Kowalik et al., 2024). Therefore, impaired control seems to play a significant role in the onset, maintenance, and harm of problematic gaming.

The idea of impaired control and behavioural addictions also exists within our cultural system that often glorifies financial spending and impulsiveness for capitalist companies' monetary gain. The term addiction has infiltrated our everyday life, as people attach it lightheartedly to things they do often, like the kids did in Carter's study above. Bailey points to the modern dichotomy of behavioural addictions, as the person is both robbed of their agency by their addiction and given it by their own active participation in the behaviour (2005). Medicalising behaviour as addiction can divide helpless "addicts" and expert therapists, an imbalance of knowledge and power (Bailey, 2005, p. 540). Problematic behavioural habits, from video games to shopping to sex, may be partially a product of our consumerist culture (Bailey, 2005), which urges more, more, more. Counsellors seeing clients with PG may benefit from knowing some of the underlying cultural discourses around addiction and self-control.

The Impact of COVID-19 on Problematic Gaming

This literature review was written during the global COVID-19 pandemic, while research was still emerging about its widespread impacts on social, physical, and psychological health. Lockdowns may have significantly impacted those vulnerable to PG. Experts predicted an increase in PG during this time (King et al., 2020b; Ko & Yen, 2020) as people spent more time online at home (Mehta & Murky, 2020). During 2020, the gaming industry experienced an unprecedented 23% increase in revenue (Wijman, 2021). Fernandes et al. (2020) reported that adolescents gamed significantly more during lockdowns, because adolescents had fewer social activities to participate in and those already struggling with PG had fewer opportunities to get help. The pandemic brought its own stresses to many, including financial strain, health services developing backlogs, and concerns about catching the virus. This may have driven those who seek escape in gaming deeper into their games (King et al., 2020b).

Problematic gaming during the pandemic often overlapped with mental health struggles.

An Italian study found that greater levels of loneliness at the beginning of lockdown predicted higher gaming addiction reports later (Rogier et al., 2021). Mehta and Murkey (2020) found that those struggling with social anxiety and similar interpersonal challenges reported more significant internet use issues during lockdown. An online survey of nearly 3,000 adults found that they significantly increased their online gaming during quarantine, especially young men (Sallie et al., 2021). This increase was associated with depression, anxiety, and psychiatric symptomatology (Sallie et al., 2021). Stress related to COVID-19 in those already struggling with compulsive online behaviours only heightened feelings of depression, loneliness, and escapism (Fernandes et al., 2020). This would likely have created a negative spiral, where vulnerable individuals had less protective social structures, gamed more, felt worse, which made them want to escape more and more into the game. This negative cycle may have been hard to break after lockdowns ended (King et al., 2020b). So far from the research literature, it seems the COVID-19 pandemic may have been responsible for escalating risk for those already vulnerable to PG.

Conclusion

PG is an emerging field of social concern and academic inquiry. Various organisations have sought to define and categorize PG, the most prominent being the American Psychological Association and World Health Organization. However, due to emerging research, their criteria may need to be revised to distinguish between problematic and healthy gaming habits (Deleuze et al., 2017; Starcevic et al., 2020; Stehmann, 2020). I evaluated research studies using IGD and GD criteria with the caveat that some people who fit those criteria may not have a problem and others who do might not fit the criteria.

Research points to a number of risk factors for PG. Adverse childhood experience (Wei et al., 2019), strained parental relationships (Koc et al., 2020), low self-esteem (von der Heiden et al., 2019), and social anxiety (Sioni et al., 2017) may increase an individual's risk. PG itself may be a symptom of other issues. Vulnerable individuals may seek escape from real-world struggles into a virtual avatar (Barbera & Haselager, 2020; Burleigh et al., 2017). Virtual avatars may be a

key influence on PG due to their representation of attractive, idealized personal qualities. Real and virtual identities merge as players invest more time and energy into the game character at the expense of their real self (Barbera & Haselager, 2020; Stavropoulos et al., 2019).

My avatars, of soccer players and adventurous warriors, mirrored experiences in the world where I had felt alive and capable. They became an escape when I had low self-worth. However, by investing in them I removed myself from the world, doing less and feeling less competent.

Problematic gaming, a coping mechanism for real-world issues, can exacerbate current struggles or cause new ones. Yet there are options to help prevent PG and support problem gamers. Increased awareness of risks (Stevens et al., 2021), improved social connections (Sioni et al., 2017) and family bonds (Koc et al., 2020), mindfulness (Li et al., 2017), and self-regulation strategies (Apisitwasana et al., 2018) may help. I rebuilt my social identity through community integration, increased self-regulation through activities such as yoga, and a sense of accomplishment and purpose in a new career path. These processes met in a real way the needs and desires games could only falsely address.

Counsellors working with clients with PG may benefit from understanding an individual's unique underlying motivations and vulnerabilities that drive the gaming behaviour. Behavioural addictions can be better understood through understanding personal vulnerabilities and the relief provided by the activity (Jacobs, 1986). Additionally, the mixed cultural messages of indulgence within capitalist economies can create problematic behavioural push-and-pulls, as well as stigma (Bailey, 2005). Discourses on addiction and problematic behaviour within cultural frameworks and gaming communities may adversely affect counselling clients (Bailey, 2005; Carter et al., 2020; Jung, 2020).

Problematic gaming can be a significant source of distress; additional research can help academics and clinicians understand this relationship. In this literature review, I considered emerging trends in this rapidly evolving field of interest. My experiences, cultural standpoint,

and perspective shaped my conclusions, and I used my history as a real-world example.

Additional qualitative inquiry into problem gamers' lived experiences may illuminate their unique psychological challenges and changes to self-identity heading into and out of problematic gaming.

Chapter III: Methodology

This study posed the question: "How do those with lived experience of problematic gaming interpret their relationship with their chosen avatar(s)?" I used interpretative phenomenological analysis (IPA) to investigate avatar identification in PG due to the method's increasing prominence in psychology research, suitability for a master's thesis timeline, and ability to explore experiences in depth. I formatted the study question to match IPA's open, exploratory framework (Smith et al., 2022).

I used Smith, Flowers, and Larkin's 2022 second edition textbook *Interpretative Phenomenological Analysis: Theory, Method and Research* to guide my study. It seemed the definitive textbook on IPA, written by three prominent IPA researchers. There is also precedent within my program for its use. In a search of Athabasca theses from the faculty of health on the Government of Canada website, I found six previous IPA masters studies (five in counselling, one in nursing). Each used the 2009 first edition of the Smith, Flowers, and Larkin textbook (Duret, 2018; Hau, 2018; Monks-Janzen, 2018; Purnell, 2019; Sakamoto, 2015, Suteu, 2015). Before the 2nd edition textbook was released, I used Smith and Nizza's 2021 *Essentials of Interpretative Phenomenological Analysis* and a range of IPA methodology articles to understand the fundamentals and breadth of the method. I drew from each of these sources to inform this methodology section.

In this chapter, I document the foundations of IPA along with my sampling, interviewing, data collection, data analysis, limitations, and ethical considerations. My study used five participants with lived experience of PG. These sections illustrate how I prepared, conducted, and wrote up the research.

Rationale for Using IPA

Previously overshadowed by quantitative methods and overlooked by prominent journals, qualitative research is now increasingly accepted and valued in psychology literature (Smith & Nizza, 2021). Researchers can use qualitative analysis to answer more exploratory,

open-ended questions. Considering the recent emergence of literature on PG and the potential confusion in the WHO's and APA's classifications (Deleuze et al., 2017; Starcevic et al., 2020; Stehmann, 2020), exploratory methods can help illuminate unexplored elements of PG experiences. Integrating detailed accounts through IPA can contribute depth and new avenues for understanding PG.

Video games and the virtual avatars I inhabited provided me an escape from the stresses and uncertainties of life. At the same time, they significantly contributed to my real-life problems. IPA seemed a pragmatic approach to tackle this and other potential dichotomies, as it is "especially good at illuminating ambiguity and tensions in people's reactions to what is happening to them" (Smith & Nizza, 2021, p. 4). IPA also blends well with a counselling background. Miller and colleagues (2018) believed that counselling skills can translate naturally to IPA, as counsellors are trained in active listening, building rapport, and embracing the flexibility needed to attend to the unique perspectives of individuals. Therefore, IPA fitted my skillset and the potential complexity of my topic.

Use in Similar Studies

As of 2021, there was some precedent for using IPA in problematic gaming research, with three previous studies conducted. One used publicly available shared stories rather than interviews (Chappell et al., 2006). Another, in planning review when I submitted my thesis proposal and now published, explores the differences between GD and non-pathological gaming (Karhulahti et al., 2022). It examined the lived experiences of problem gamers, healthy gamers and medical experts with experience in the field (Karhulahti et al., 2022). At the University of Florida in 2020, James Solari published an IPA doctoral thesis entitled *Therapy with Disordered Gamers*. Therefore, there is precedent for the use of IPA with PG populations, especially in these relatively early stages of research into PG. At the same time, the relative lack of research here also represents a gap in the current literature.

IPA has been used for identity, mental health, and addiction literature. I include several examples here, though it is not an exhaustive list. In recent years, it documented peoples' personal experiences of: identity formation for synthetic cannabinoid users (Kassai et al., 2017), identity crises for those living with Chronic Fatigue Syndrome (Dickson et al., 2008), identity in engineering career transitions (Huff et al., 2019), identity crises for musical professionals (Oakland et al., 2013), identity for those with Tourette's Syndrome (Malli et al., 2019), the lived experience of co-dependency (Bacon et al., 2020), the experience of pregnancy during anorexia nervosa (Chinello et al., 2019), recovery from alcohol dependency (Vegeris & Brooks, 2021), and the transition from active substance addiction to the role of recovering helper (Racz et al., 2015). IPA has a history of application to identity themes: three of the twelve IPA reference studies Smith and Nizza (2021) recommend including identity in the titles. IPA seemed an emerging and robust tool to explore people's unique stories of a significant lived phenomenon such as PG.

Philosophical Underpinning

IPA is an inductive, experiential qualitative methodology. Jonathan Smith (1996) developed it in the early 1990s to explore issues in health psychology. Since then, researchers across the globe have expanded it to a wide variety of disciplines within and beyond psychology (Smith et al., 2022). IPA researchers attempt to understand phenomena through the context and story of those who have lived it (Pietkiewicz & Smith, 2014). They do so by incorporating three philosophical foundations: phenomenology, hermeneutics, and idiography (Smith et al., 2022). IPA focuses on the meaning (hermeneutics) of individuals' (idiography) experiences (phenomenology) (Smith et al., 2022). Below, I explain these three parts in detail.

Phenomenology

Smith (1996) developed IPA using the philosophy of phenomenology. Phenomenological researchers prioritize lived experience over theory (Pietkiewicz & Smith, 2014, Smith et al., 2022, Smythe & Spence, 2020). They focus on the meaning that individuals attribute to their lived experience (Noon, 2018; Thomas, 2020). The researcher is encouraged to seek rich

descriptions over opinions and bring an open mind to what they might discover (Thomas, 2020). Phenomenological research is therefore focused on the subjective rather than an objective interpretation of an event.

Edmund Husserl developed the theory of phenomenology, which was then forwarded by his pupil Martin Heidegger (Smith et al., 2022). Husserl opened scientific inquiry to explore people's lived experience (Amos, 2016). He sought to challenge the traditional idea that knowledge was the domain of the elite, highlighting the meaning and significance in people's everyday experiences (Smith et al., 2022). Husserl encouraged setting aside preconceived opinions (called bracketing) so that we can learn through direct conscious awareness, free from assumptions (Reiners, 2013). IPA incorporates Husserl's focus on personal description while "put[ting] aside existing scientific constructs or any presupposed view of the world, which can act as a concealing barrier from the experience under investigation" (Smith & Nizza, 2021, p. 7).

Heidegger founded philosophical hermeneutic phenomenology, basing his work on Husserl's but then branching out to his theory (Burns & Peacock, 2019). The hermeneutic element, discussed in the next subsection, prioritizes interpretation over description (Burns & Peacock, 2019). Rejecting Husserl's observatory method, Heidegger considered all knowledge interpretation and believed that only by dynamically encountering the world can we understand it (Amos, 2016; Horrigan-Kelly et al., 2016). He believed that we cannot separate our opinions and views from our interpretations of the world (Reiners, 2013). Heideggerian phenomenology seeks to understand meaning that is hidden within the phenomenon and can only be understood through interpretation (Smith & Nizza, 2021; Smythe & Spence, 2020). The "interpretative" element of IPA comes from Heidegger's philosophy. IPA researchers see their participants as unique individuals connected to a complex web of relationships, symbols, and environments which create their lived experience (Smith et al., 2022).

Hermeneutics

Hermeneutics concerns the human process of making meaning by interpreting experiences (Smith & Nizza, 2021). This approach embraces ambiguity, as any act of interpretation is not neutral (Horrigan-Kelly et al., 2016) and the mystery of fully understanding an experience is always a little beyond one's grasp (Smythe & Spence, 2020). A dynamic process, in hermeneutics the researcher plays a key role in interpreting others' experience (Pietkiewicz & Smith, 2014). As Thomas (2020) stated, "The researcher *is* the research tool" (p. 1).

This researcher's stance creates a layered *double hermeneutic*: a person shares the subjective meaning of their experience, which the researcher then interprets (Pietkiewicz & Smith, 2014). In this way, the researcher seeks to make sense of the participant while the participant seeks to make sense of their experience (Amos, 2016). Through this double hermeneutic, the researcher looks for meanings that may have been hidden from the person's view or conveyed unintentionally (Pietkiewicz & Smith, 2014). These interwoven layers of understanding and reflective analysis represent an essential piece of creating a rich and detailed account. Ultimately, a researcher will develop a *hermeneutic circle*, where the whole illuminates the part, the part illuminates the whole, and neither can be fully understood without the other (Amos, 2016).

Idiography

Idiography represents the third and final pillar of IPA methodology. According to Miller and colleagues (2018), IPA distinguishes itself from other phenomenological methods through its idiographic approach. IPA focuses on the particular rather than the universal (Pietkiewicz & Smith, 2014). Idiography contrasts a nomothetic approach, which seeks to generalize experience (Smith & Nizza, 2021). Idiography specializes in understanding that every experienced phenomenon is contextual (De Luca Picione, 2015). It can highlight potential outliers and document important differences within a homogenous group (Smith & Nizza, 2021). Thus, IPA

researchers analyze fewer participant accounts than most other methods but do so with an intent to gather more in-depth data.

Idiography in application means that IPA explores each case before making general conclusions or themes (Pietkiewicz & Smith, 2014). IPA thrives on a deep level of analysis, comparing experiences of individuals on a case-by-case basis (Hefferon & Gil-Rodriguez, 2011). Smith and Nizza (2021) state, "single cases can be intrinsically interesting and reveal factors that would be neglected in a group" (p. 8). Further, De Luca Picione (2015) argues that an idiographic approach does not limit generalizability of knowledge but adds to it, contextualizing cases in time and culture.

Reflexivity

Researcher reflection and conscious awareness are integral to good IPA studies (Pietkiewicz & Smith, 2014; Smith et al., 2022). Reflexivity allows researchers to acknowledge and monitor their personal and theoretical preconceptions throughout the research process (Horrigan-Kelly et al., 2016). Bracketing, first described by Husserl, helps researchers remain vigilant about their views (Amos, 2016; Smith et al., 2022). With a strong reflexive practice throughout the study, IPA researchers can create layered analyses of their data and track their decisions for reviewers and auditors (Smith et al., 2022).

Horrigan-Kelly et al. (2016) recommend that reflexivity begins with exploring what has brought the researcher to the topic. As stated in my *Researcher Approach* section in Chapter I of this text, my personal experiences of PG led me here. Through creative and educational processes, I spent years reflecting on the desires that drew me into the games, the mental health challenges that intertwined with my experience, how I reconnected with the world to pull myself out, and why and when the pull, on occasion, returns. Having worked for six years with adults in recovery from drug and alcohol addiction in Canada and the UK and with children who have mental health concerns, I am passionate about developing resources to help those who are struggling. I worry about the increasing prevalence of games in young people's lives, both

because of the risk of problematic gaming and the physical, outdoors and social activities they might replace. I share my former mentor and professor Dr. Ross Laird's worry that we as a society are not ready for the accelerating technological advancements of gaming, such as virtual reality (personal communication, December 2, 2016). As a counsellor and as a person, I want to guide people away from the route that I went down. All of these values, hopes, fears, and experiences guide my interest in the subject; they offer personal resources and also vulnerabilities.

My experiences of PG made me an insider researcher (Smith et al., 2022). I may have had advantages in building rapport with participants, constructing interview questions, and delving into new conversational pathways (Smith & Nizza, 2021). However, Smith and Nizza (2021) also caution extra care with my beliefs and opinions going into the study. To mitigate the unconscious influence of my bias, I journaled my experiences throughout the interview process and wrote out my own answers to the interview questions, as they recommend (Smith & Nizza, 2021). They warned the necessary reflection may be particularly challenging for me as an insider. Following their recommendation, I engaged in a bracketing interview as the participant, with my supervisor as the interviewer (Smith & Nizza, 2021; Thomas, 2020). I debriefed themes from that interview with my supervisor to check for transparency and validity in my connections.

I wrote a reflexivity statement about my social and cultural positionality (Thomas, 2020). This reflection process helped me to understand and, when applicable, set aside some of my biases when interviewing participants and analysing the data. However, it was impossible for me to become neutral as a researcher, as attested by Heidegger (Reiners, 2013). I aimed to create a transparent analysis so that other researchers could understand my decisions and conclusions.

Sampling and Recruitment

I used five participants in this study, with one interview each. They ranged in age from mid-20s to 50; three were male and two were female. Please see the table below. In this section, I detail the rationale for that sample size and how I determined eligibility.

Participant 1	Male	Late-20s
Participant 2	Female	Mid-30s
Participant 3	Male	50
Participant 4	Male	Late-30s
Participant 5	Female	Mid-20s

IPA researchers seek to explore a particular perspective on a phenomenon (Smith et al., 2022). They require a small, homogeneous group of participants who share a similar experience (Larkin et al., 2019; Smith et al., 2014). This selection is purposeful and directed (Smith et al., 2022). Homogeneity means that participants' perspectives and experiences of the phenomenon should have more in common than different (Larkin et al., 2019; Smith & Nizza, 2021).

To create a homogeneous sample, I had two inclusion criteria. The first was the World Health Organization's ICD-11 gaming disorder symptom criteria to determine eligibility (WHO, 2021). In comparison with the APA's internet gaming disorder criteria, it may better differentiate problematic from healthy gaming (Starcevic et al., 2020). Secondly, I used an inclusion question to involve only those who primarily played the genres role-playing games (RPGs) or massive multiplayer online role-playing games (MMORPGs). While other game genres involve avatars to varying degrees, RPGs and MMORPGs players generally have a consistent, customizable avatar. These two inclusion criteria focused perspectives on avatar identification in problematic gaming (Smith et al., 2022).

One of the potentially significant limitations of the two inclusion criteria was participant self-reporting. I trusted their word that they had met the WHO criteria, rather than, for

instance, having been diagnosed by a professional. Requiring a previous diagnosis would have gone against the subjective nature of my focus on the term problematic gaming (rather than IGD or GD). While taking participants' word for their gaming habits having been clinically relevant according to GD criteria, I also needed to trust in their self-assessment that gaming had been a significant problem in their life. Requiring a diagnosis also would have severely limited the sample pool due to historically low prevalence of help-seeking behaviour in problematic gamers, eliminating many potential participants who had had real struggles with gaming and gotten better through their own means (Konkolÿ Thege et al., 2015b).

At one point in the analysis, I wondered about the fit of one participant's experiences due to a lack of overt harm in their statements; on significant reflection, I chose to include their data as they had: 1) stated in their pre-interview email that they met the WHO criteria, 2) spoken with in-depth understanding of motivations for PG, and 3) inferred the harm of PG in subtle ways. Therefore, to stay true to my description of PG and open the study to diverse experiences within the phenomenon, I initially confirmed WHO criteria and then trusted in participants's self-assessment. If any participants had been obviously not impacted by gaming, I would have conferred with my supervisor before removing their interview from the data set.

Considering symptoms of PG would need to have caused significant distress for over a year, the overall experience will likely have been significant to the person. IPA works best when the subject matter is particularly important to participants (Smith et al., 2022). Recruitment sometimes needs to go through community gatekeepers or snowball sampling (Smith et al., 2022). I reached out to participants through gaming forums, addiction recovery forums, and the Athabasca University general forum.

Samples in IPA are usually quite small to allow for rich detail (Smith et al., 2014). Miller and colleagues (2018) use Chan's 2018 study, where there were three participants, as an example. Sample sizes may also depend on time constraints (Callary et al., 2015). Smith, Larkin, and Flowers (2022) recommended five participants as a good number for a master's thesis. Of

the six previous Athabasca University IPA studies I consulted, they had a mean of 4.5 participants, with a range of 3-7 (Duret, 2018; Hau, 2018; Monks-Janzen, 2018; Purnell, 2019; Sakamoto, 2015, Suteu, 2015). Therefore, I aimed for four-to-six participants to provide for any extra interest and participant dropout. I ended up interviewing five participants, with no dropouts post-interview.

Interviews

Before beginning the data collection, I shared my recruitment poster with participants and had them sign an informed consent form based on the Athabasca University Research Centre templates (2021b). During interviews, I reminded participants of the consent process for clarity (Smith et al., 2022).

As recommended by Smith et al. (2022), I offered participants a "time-limited right to withdraw" of up to one month after the interview, along with a scheduled opportunity to review the transcript for accuracy and the right to redact any particular comments before publication (p.48). This offers a more "honest" approach than the promise for right of withdrawal at any time, which is not possible after publication (Smith et al., 2022).

I informed participants about the setup and overall plan for the interview, aiming to build a foundation of rapport and trust early on (Smith & Nizza, 2021). I kept their information anonymous by changing all identifying characteristics, such as names and locations, during transcription (Smith & Nizza, 2021). This is the extent to which qualitative studies can keep shared information confidential (Smith et al., 2022). I kept digital data password protected with strong passwords and physical data stored in a locked cabinet. All of these requirements align with IPA validity and AU regulations for research.

IPA interviews aim to generate rich qualitative data (Smith et al., 2022). They tend to incorporate a schedule of questions to loosely guide the process, while they are primarily "led by the participant's priorities and concerns" (Smith et al., 2022, p.55). I conducted one semi-structured interview with each participant. Smith, Larkin, and Flowers (2022) consider

interviews to be one of the best ways to gather data in IPA, with semi-structured, in-depth, one-one interviews the most popular (Pietkiewicz & Smith, 2014; Smith et al., 2022). The aim is to get the participant talking and intervene only as necessary (Smith et al., 2022).

Athabasca University Research Centre (2021a) recommends that research be done via social distancing at that time. I used video-conference interviews due to my residence in the UK and COVID-19 precautions. Online interviews presented challenges, such as creating rapport, but were also a good substitute as required (Smith & Nizza, 2021). I would have preferred to do interviews in person, as I believe that a lot can be learned from body language. It may have been comfortable or uncomfortable to interview online for participants with previous problematic technology use. Those with a strong IT identity, for instance, may have preferred it. For others, it may have reminded them of their PG. Throughout the interviews, participants generally seemed at ease and reported no concerns when I checked in before and after the body of the interview. Considering I now live in England, using online interviews greatly expanded my potential pool of participants.

Lived experience can sometimes be challenging to capture in language (Amos, 2016). IPA interviews tend to be dynamic and fluid in nature to accommodate this challenge, with space for unexpected conversations and avenues to arise (Pietkiewicz & Smith, 2014, Smith et al., 2022). A flexible approach allows time for interviewees to come to the meaning behind things, a key aim in IPA (Thomas, 2020). In my interviews, I endeavoured to create a non-judgmental environment for the participant which puts them at ease to share their story (Smith & Nizza, 2021). I hoped to build rapport, gain trust, and be sensitive to non-verbal behaviour (Pietkiewicz & Smith, 2014). I attempted to consciously maintain a "careful balance between guiding and being led" by the participant, opening myself up to unexpected insights and directions (Hefferon & Gil-Rodriguez, 2011, p. 2). This led to unexpected insights and topics.

Incorporating visuals of participants' avatars in the interviews may have led to strong qualitative data points. We could have both reflected on the meaning behind their choice of

physical attributes and fashion, and their involvement (or lack thereof) in different communities. However, I chose not to ask participants to show me their avatars for two reasons. For one, these avatars and accounts may no longer exist. For instance, I have deleted many games and character storylines over the years in my attempts to curb my gaming. Secondly, and more importantly, we would be speaking about times in their lives where they were seriously struggling, perhaps partly because of the strong allure of those characters. Seeing the characters would mean booting up old games and I did not want to induce that headspace for them. I know for myself, going through an old character and game would increase the likelihood of me wanting to play and perhaps slip back into some old patterns. It would be similar to going with a person in recovery from drugs or alcohol back to a spot where they had used intensely. It could be rich in information and feeling, but also risky. While it may have been a missed opportunity, I chose the side of caution and greater safety for my participants.

It is good practice to have an interview plan in advance (Pietkiewicz & Smith, 2014; Smith et al., 2022). Interview guides are lists of simple questions that guide an interview, allowing room for participants to share their story in their own way and to subtly guide the interview towards answering the study questions (Smith et al., 2022). Students tend to produce interview schedules that are too long and detailed, which can constrain a participant's sharing (Hefferon & Gil-Rodriguez, 2011). Instead, Hefferon and Gil-Rodriguez recommend a "less is more" approach (2011, p. 3). I used Smith, Larkin, and Flowers' (2022) guide to constructing an IPA semi-structured interview.

An iterative process, my interview guide was open to change through consultation with my supervisor, my bracketing interview, and my own ongoing reflections as I prepare (Smith et al., 2022). Although it is possible to tweak it between interviews (Smith et al., 2022), I maintained the same guide while adapting my follow-up questions to the particular interviewee. Unlike quantitative methods, each interview in IPA is meant to be unique, with the homogeneity

of the sample providing consistency. Overall, I conducted one semi-structured interview with each participant.

Data Analysis

Each interview was audio-recorded, stored securely following AU's confidentiality policy, and transcribed verbatim (Smith et al., 2022). Once I stored my raw data as transcriptions, I moved into analysis. In analysis, IPA researchers bring an epistemological stance of inductively generating theory, rather than validating theories from outside the data set (Horrigan-Kelly et al., 2016). Therefore, analysis involves close reading and re-reading of the data, and building themes from within it (Smith et al., 2022). Smith, Larkin, and Flowers claim that there is no exact procedure for analysis, instead detailing "a set of common processes ... and principles ... which are applied flexibly" (2022, p.75). Analysis is a dynamic, iterative cycle (Smith et al., 2022). Generally, the more experienced the researcher, the more fluid and less structured the analysis process (Smith et al., 2022). Especially for novice IPA researchers, Smith et al. (2022) provide a seven-step guide for the data analysis process, which I outline below. They give practical examples for each step. Following analysis, I wrote up the final report.

IPA analysis involves interpreting each case individually to build Personal Experiential Themes, then cross analyzing these themes to generate General Experiential Themes from across the sample (Smith et al., 2022).

Step One. In Smith, Flowers, and Larkin's (2022) first step, the researcher immerses themselves in the first interview they will analyze. They read and re-read the individual transcript, including listening back to the audio recording. Here the researcher builds an idea of the interview's narrative structure (Smith et al., 2022).

Step Two. The researcher makes comments and notes throughout the data set (Smith et al., 2022). This exploratory noting process stays close to the participant's account while building the initial basis for researcher interpretation (Smith et al., 2022). It includes both objective and subjective notes.

Step Three. The researcher builds experiential statements based mainly on the exploratory notes, supplemented by the original transcript (Smith et al., 2022). The aim is to keep these statements tied closely to the participant's experiences (Smith et al., 2022). Yet they "reflect not only the participant's original words and thoughts but also the analyst's interpretations" (Smith et al., 2022, p.87).

Step Four. The researcher seeks connections between experiential statements by scattering them and then clustering them into groups (Smith et al., 2022). This can be done manually or electronically (Smith et al., 2022).

Step Five. The researcher titles each cluster of experiential statements (Smith et al., 2022). These titled clusters become Personal Experiential Themes (PETs), meaning that they "reflect analytic entities" of the individual person's experiences (Smith et al., 2022, p.94). Additionally, each PET will likely contain experiential statement sub-themes (Smith et al., 2022). With or without sub-themes, PETs must include direct quotations from the transcript to support them (Smith et al., 2022). Smith et al.'s (2022) example has four PETs. Less themes overall may create greater depth to each theme (Hefferon & Gil-Rodriguez, 2011).

Step Six. The researcher repeats steps one through five for each transcript (Smith et al., 2022).

Step Seven. With a set of PETs for each transcript, the researcher moves into crosscase analysis to "highlight the shared and unique features of the experience across the contributing participants" (Smith et al., 2022, p.100). The researcher builds a table of General Experiential Themes (GETs) through a close examination of the PETs and their sub-themes (Smith et al., 2022). This table demonstrates convergence between participants' shared experiences, interweaving direct quotations from their transcripts into each GET (Smith et al., 2022). Across the table, divergence of experience and unique perspectives should also be clear (Smith et al., 2022).

Write-Up

Smith and Nizza (2021) recommend writing up the results immediately after the analysis "to keep the momentum going and allow the interpretation to develop further" (p. 57). I built a narrative account of how the participants' stories wove together, integrating my own interpretations and participant quotes (Pietkiewicz & Smith, 2014; Smith & Nizza, 2021). Using interviewees' words gives validation to themes, by allowing their voice to shine through and letting the reader interpret the validity (Pietkiewicz & Smith, 2014). Hefferon & Gil-Rodriguez (2011) recommended a manageable number of master themes (known in IPA as GETs), such as three. I ended with my analysis with four GETs, and then through rewriting reduced them to a more cohesive three in the write-up. During the study, it is common in IPA for unanticipated themes to arise, which happened at several points (Smith & Nizza, 2021). Overall, in my results section I present three master themes that follow a narrative account of avatar identification in problematic gaming, incorporating double hermeneutic interpretation and participant quotations throughout.

Validity in IPA

In this section, I outline how I validated my IPA study. Qualitative research studies can sometimes be difficult to validate. They have only gained general acceptance and recognition within research communities in recent decades, compared with the longer and more prominent history of quantitative analysis (Smith, 2011a). In the past, qualitative research was often judged by quantitative standards, thus making it harder to publish (Smith & Nizza, 2021). For instance, IPA does not aim to produce generalizable results but interwoven individual experiences in a specific group (Hefferon & Gil-Rodriguez, 2011). Therefore, the evaluative criteria needs to match its distinct process and goals (Smith, 2011a). Thankfully, new qualitative measures of validity, reliability, and quality are now available. Rather than a strict set of measures, validity can represent a recursive, transparent process of reflection and building connections throughout the research study (Hayashi et al., 2019).

As recommended by Smith and Nizza (2021) and other IPA papers (e.g. Miller et al., 2018), I used Smith's guide in *Evaluating the contribution of interpretive phenomenological analysis* (2011a) and his subsequent reply to the commentaries (2011b) to evaluate my study. Within these articles, Smith developed the IPA Quality Evaluation Guide. He listed criteria to differentiate between acceptable, unacceptable, and good IPA. Briefly, the four criteria for an acceptable IPA paper are: foundations in IPA philosophy, transparency, coherence and interest, and adequate sampling from the data (Smith, 2011a). Unacceptable studies lack one of these elements, and good studies build on them to produce work that engages the reader and significantly contributes to the topic's literature (Smith, 2011a). I referred to this guide to evaluate my work once I had completed a second draft of my study results. My evaluation is included in the discussion section.

Grossoehme (2014) stated that validity in qualitative data means that the portrayal of the data matches the essence of what was originally said. This aligns with Smith's fourth requirement, using quotations which evidence conclusions, and the important process of maintaining participant voice through the layers of interpretation. Throughout the results section, I used numerous quotations from the participant interviews to illustrate my findings. Thereby, readers can assess the validity of my findings through the widespread use of raw interview data within the results section.

In IPA, the data is inseparable from the participants' and researcher's interpretations. Hayashi and colleagues (2019) described interpretative validity in qualitative research as the researcher's process of constructing meaning of the data. It involves "the conscious processes, hidden intentions, beliefs, concepts, and values of the participants" (Hayashi et al., p. 100). Therefore the interpretation must be strong, creative, and understandable. This value aligns with Smith's (2011a) second requirement of an acceptable IPA paper, transparency of process. Indeed, Smith (2011b) encourages boldness and creativity within a strong IPA framework as a means to enhance a study and the methodology.

From a quantitative perspective, the double hermeneutic interpretations of IPA may seem to reduce its reliability and repeatability. However, Grossoehme (2014) argues that a researcher's interpretations can in fact enhance reliability. To achieve reliability, a second researcher should be able to understand the interview and review process from the research notes (Grossoehme, 2014).

Ethical Considerations

Throughout my thesis, I used the ethical guidelines for human research from the Government of Canada's Panel on Research Ethics (2020) and the Athabasca University Research Centre (2021a). Smith and Nizza (2021) outline ethical considerations specific to IPA, which I address here. A research ethics board acting through Athabasca University assessed my study's ethics proposal before I recruited participants.

Informed consent, voluntary involvement, and participant well-being are key principles in research ethics (Panel on Research Ethics, 2020). I followed Athabasca's informed consent process, using their templates for recruitment and informed consent documents. I made clear that participants can "refrain from answering questions that make them uncomfortable, interrupt the interview at any time, and withdraw their consent for their data to be used for a period after the interview has finished" (Smith & Nizza, 2021, p.17). I determined this period of time in advance with my supervisor's instruction as one month, and informed participants in writing beforehand and reminded them verbally at the end of interviews. I anonymized their participation in the study, making sure that any identifying features were changed within the transcripts and final document (Smith & Nizza, 2021).

I also created a well-being plan to safeguard participants and myself (Grossoehme, 2014). I monitored participants during the interview process and checked in with them at the end to ascertain if they needed additional support based on the topics of conversation (Noon, 2018; Smith & Nizza, 2021). This included participants' nonverbal cues throughout the interview to assess their well-being (Smith & Nizza, 2021). No participants seemed in distress or

stated they needed any support at the end of the interviews. Using an online platform likely made this more difficult for me, but may also have helped participants feel more safe, as they could choose their location. If needed, I would have referred them to local support organisations. I also monitored my own well-being to ensure that I was okay during and after the interview process, as IPA interviews can sometimes be intense for researchers (Smith & Nizza, 2021). Especially as I have my own experiences of PG, I checked in with myself following interviews.

Conclusion

IPA is a valid research methodology when studying people's lived experiences in depth. It uses a combination of phenomenology, idiography, and hermeneutics. I used Smith and colleagues' 2022 textbook on IPA as a guide for my interviews, individual analysis, cross-case analysis, master themes, and final write-up. I considered key points of the validity of IPA research throughout the process to try to create a sound study and followed Athabasca University's ethical guidelines. In the following section, I have written up the results of the five participant interviews, interspersing their quotations with my research interpretations to build an overall picture of qualitative research data.

Chapter IV: Results

I interviewed five participants with lived experience of problematic gaming. They stated they had met the criteria for the World Health Organisation's Gaming Disorder (2021) at some point in their lives. Three identified themselves as male, two as female. All were students at Athabasca University, having seen the recruitment poster displayed on the university's homepage. All were adults living in various parts of Canada. I anonymized their names and information and refer to them as Participants 1-5. Interview lengths were as follows: Participant 1, 92 minutes; Participant 2, 64 minutes; Participant 3, 69 minutes; Participant 4, 58 minutes; and Participant 5, 48 minutes. Then I analysed each interview as a qualitative data set.

Through IPA analysis, I arrived at three Group Experiential Themes (GETs), comprising a total of seventeen subthemes. Considering IPA's interpretative nature, I found that I could have grouped participants' experiences in different ways throughout the layered, iterative analysis process. I believe that the GETs I developed provide a narrative framework coherent with participants' accounts while answering my original research question and subquestions. The GETs are: Avatars as doorways into a safer world, Social identity needs driving avatar immersion, and Returning to the real world. The themes take a general narrative approach, beginning with their initial experiences and ending with how they emerged from the other side. While the purpose of this study was not to document problematic gaming, using a narrative framework makes the key points about their avatar identification more contextualized and digestible.

Avatars as Doorways into a Safer World

In this theme, I explore how participants interpreted their avatar relationships during the beginning of their problematic gaming. They initially used gaming to relax and socialize, as do much of the general population. Their avatars varied from alternate versions of themselves to characters very different from who they were in the real world and represented a fun way to explore their personality. However, adverse and sometimes traumatic real-world experiences

shifted their gaming from healthy and harmless to a negative spiral of distress and escapism.

Their avatars reflected this shift, often becoming a substitute identity for who they could not be in the real world.

Initial Excitement about Gaming

Despite the consequences of their gaming overall, participants recalled their initial gaming experiences with a sense of fondness and nostalgia. Each started playing at different points in their childhoods and liked video games for their own reasons. Even from the beginning, it is clear that participants were attracted to particular types of games based on their personalities.

As a teen, Participant 2 was drawn to World of Warcraft (WoW) as a place to explore and socialize: "I liked it. It's an open world, so you can meet different people there." Having spent her whole life in France up to that point, she was amazed and excited to meet French-speaking people from around the globe. "You can speak with different people from Belgium, from Canada, from Africa. So it's an open world in game but also an open world in real life. You can meet different people and learn about their culture." When she moved from a free and sparsely populated version of WoW to the paid main server, where the "true players" played, she never looked back. "How can I explain it? It was amazing."

Participant 4 started playing as young as three or four, and got into World of Warcraft at age nine. He and Participant 5, who didn't mention exactly when she first began playing, were both fascinated by the idea of entering into a fantasy world. Participant 5 stated: "I was always interested in fantasy games." And Participant 4:

[4] So that was kind of the initial starting off point, like the idea of fantasy and being in a different world as a young kid very much excited me. It's like, 'Oh, this is something else that I can dive into.'

Participant 1 felt similar enthusiasm: "It blows your mind. When you're a young kid like, 'Wow, I can sit here, barely move, and do so many things." Their initial experiences mirror the sort of healthy escapism that is a draw for many gamers (Kacsmarek & Drazkowski, 2014).

Some were introduced to video games by friends or older siblings, such as Participant 3: "I got to the next high school, I met one guy, like we were really good friends. And he brought me over to his house and he showed me a couple of these games that he had been playing." For him, it began as a social pastime. He and his friend even went to great lengths to play on the same server together, a task quite difficult in the eighties made possible only by renting adjacent motel rooms and connecting their computers through a phone cord. "I can't believe we did that. It probably cost us an enormous amount of money and we played for a couple days. It was amazing, by the way."

For Participant 1, his parents got him gaming for their own reasons. "Started with the old Super Nintendo. Parents got it for me, you know, as a typical parent would for pacification, keep you quiet, keep you occupied." While he remarked that this was "typical" parent behaviour, I questioned this statement in my analysis. There are many other reasons why parents buy video games for their children, such as enjoyment. His belief is likely either based directly on what his parents said or on his own evaluation of their reasons, considering what video games later became for him.

Gaming wasn't a problem initially for all participants bar Participant 4. Even for him, it still wasn't that problematic at first, he just dove into it with the same focus and enthusiasm he did many things; while his parents decided that he was playing too much and locked his game up, it didn't seem to have significantly affected his life as a young child and he recalls being able to happily engage in school and social life. Participants seemed to experience aspects of healthy gaming at the start, such as socialisation and exploration (Starcevic et al., 2020). Participant 2 sums up those early experiences with her statement, "It wasn't that intrusive in my life."

Avatars as a Way to Explore Identity

Each participant created their avatars with an idea in mind. In this subtheme, I outline each participants' description of what their avatars looked and acted like. Some seemed to focus mainly on avatars that resembled a more interesting or powerful version of themselves, while others spoke about the fun and desire to try on different characters.

Through an avatar particularly important to her, Participant 5 created "the magic version of me." Through it, she entered into her first romantic relationship as a young adult.

Personality-wise, she described that character as just like herself, but with special abilities. She described the avatar's story in this way:

[5] She was a ranger-bard, which I know is a weird combination. But it worked; she was basically a bard for one of the nature deities. And she didn't really have a place to go, we didn't really have like a ranger guild. She ended up in the church. But then, we had a DM on and she found out that there was like a hidden version of the church where all the rangers and bards and druids and stuff used to be part of the actual full church. ... At the same time, she also got involved with finding a sacred relic, basically, and got involved with fighting a dragon.

She continued in a detailed description of that character's story and role within the community. When I asked why she felt especially connected to the character, she stated: "It would be that journey of finding the hidden parts of the faith and incorporating that, because I mean that was kind of part of becoming more pagan myself a couple years before that." Her avatar allowed her to explore parts of her real self.

The choice between good and evil was important for Participant 5. She mentioned it several times throughout our interview with regards to how her characters fit in the world, such as: "Usually I'm playing like chaotic good or neutral good." This description points to the social context of her role within the avatar community. When talking about the Mass Effect main character Shephard (whose physical appearance and personality cannot be altered), she stated:

[5] The character's kind of set, but they have a lot of interactions that have choices that matter in the game, that is more, are you going to end up playing as like a paragon, like a good guy, or renegade, that's more the intimidate way, and then that starts to influence the rest of the game.

Therefore, for her detailed customization of appearance isn't necessary in bonding with a character and determining how she wanted to play the game and who she would be in that world.

Participant 3 described the various avatar personas that he would create:

[3] So with just about every MMO I've played, I've always used just a small handful of character names. And each of those character names, I identify with a certain type of personality, a total persona. Like, I could write an entire biography of each one of these people. I think there's three of my main ones. And one of them's like this roguey-type-merchanty character. One of them is this just brawny, super big warrior dude. And then I used to-- way back when I was a younger man, I used to play a female character. And she was this kind of roguish rangery-type character.

In the above quote, he referred to the avatar personas as "people" in themselves, with full lives and backstories. He admitted to creating avatars very unlike himself:

[3] Often the roles that I would pick would be people that I would never be in real life, too. That's the other part of it. So you know, a rogue character that's kind of thieving but also a bit of a merchant, really high social skills. Three total things that I am not! I am not roguish. I have the cunning of my cat sitting on the couch. ... Never! Never in my life. And then a big brawny warrior? I'm a computer nerd!

Participant 2 took time and care whenever setting up a new character, because she knew it would be hard to change after the initial customization. "When I create a character, I would spend maybe one hour in customising and finding the name. … You take your time to select everything, to set up your character." She stated that, "I like to play female [avatars]." This

opened up a wider discussion of gender within gaming, which will be discussed later in this chapter. She was proud to be a competitive female gamer and to portray herself in the game as female. She described changing her character's costume and updating hair and clothing styles. Participant 2 was a very social gamer and she related to her avatar as a social extension of herself in guilds and other groups. "Finally your character is something that represents you when you talk with others. So you take care of it."

Participant 2 reflected back to her first avatar with fondness, even if she made many character building mistakes when learning the game. "So I still love like, for example, my truly first character. ... I remember my first name it was in French, it's petite lapin, which in English [means] small bunny. I was so young." At this she laughed, and the nostalgia for youth and the beginnings of things was clear for her.

Participant 4 also laughed as he remembered his first characters on World of Warcraft. "I started off my first character not really understanding any of the game systems or anything like that. So I completely miffed my character and was next to useless." He chose avatars that fit his real-life personality; during our interview, he was talkative and bubbly.

[4] So more or less anything that was big, beefy and in your face. ... I need to jump around. I'm very fidgety as is, as a person. So it's nice to be able to have to watch for things and essentially do tons of things in order to survive.

Participant 1 also looked for characters that resembled himself and, more particularly, his life circumstances. He was much less interested in appearances or persona than in the avatar's social situation. In fact, it was how he chose games:

[1] Many of the games I found I wasn't interested in either I didn't, I couldn't relate to the main character in terms of their struggles. It never mattered their specific identity, if you know what I mean; like, it didn't matter the gender of the main character or their ethnicity, none of that. It always -- what resonated with me was their struggles.

Further on, I explore in more depth how Participant 1 immersed himself in underdog characters that resembled a version of himself. For him, identity played a deep and core part to his escapism.

Participant 1 also found that how he related to avatars changed based on his life experiences. For instance, he initially had no interest in the Mass Effect games and their military spaceship captain main character, Commander Shepard. However, after he lost a friend whose favourite games were the Mass Effect series, he gave it another shot.

[1] Nostalgic, it became very nostalgic. Because I was reliving memories with him, a friend that had passed.... And then because my situations in life had adjusted, one, notably because of the military, the game was kind of like, 'Oh, neat, like a military kind of style.' Obviously much different, but that's what made me fall in love with the game, not just for the nostalgic aspect of it. But I found I was able to relate more to the story now, as opposed to when it first came out when I was younger.

Overall, participants chose avatars that reflected themselves or allowed them to be someone completely different. Some held fond memories of their first, often "useless" characters through whom they entered into the game world. Some sought to recreate themselves in the gaming worlds as more able, confident, and social. While their initial experiences of gaming and their avatars were harmless curiosity and fun, their escapism turned from pastime to a defence mechanism when their life situations changed.

Adverse Real-World Experiences

Participants' experiences of gaming changed when their real-world situations changed. For some, gaming became an escape from stressful environments, where they could lose themselves and forget their troubles. Participants 1-4 all described specific difficult situations they faced in the real world that led to them escaping into virtual realities. Participants 1, 3 and 4 all faced challenging and at times traumatic experiences growing up. Participant 2's adversity came as a young adult. Participant 5 did not describe her initial reasons for gaming

problematically. Several participants described low self-esteem as a contributing factor to their PG. All participants described adversity at some point in their lives growing up, and four linked that directly to their increased gaming.

When Participant 1 was nine, his parents' arguments escalated. In response, he turned to the pacifier they had provided:

[1] I started noticing arguments in the household. Sometimes they would get very elevated. I hear yelling, and then I hear some things being thrown. So then it was like, I just want to block it all out. So I would try to turn up the volume and just fall into the game as much as possible. So I wouldn't have to focus externally on the environment, what's going on, the chaos, all that.

He had described his parents getting him games as a pacifier and I spent a long time contemplating that metaphor. Video games may have functioned as a pacifier for his own emotions, as his parents intended. However, in his description above, his emotions would have been in reaction to their behaviour. Therefore, rather than primarily pacifying him, gaming seemed to form a shield that protected him from the volatile emotions and behaviour of his loved ones.

That shield extended to other areas of his life as well. Participant 1's problems weren't all at home, unfortunately. "Being a fat kid at school getting bullied, you just feel like nobody cares." For him, it created a sense that nowhere was safe in the real world:

[1] I feel like it can be a compounding effect when it's not just outside the home that is difficult, like school, work, anything like that. But when your home life is also stressful and stuff like that, I feel like it really amplifies the desire to escape, desire to do something and not think about reality.

At home Participant 1 could drown out the fighting around him. He could simultaneously distract himself from the emotional pain and isolation he felt from his experiences at home and at school.

Unlike the others, Participant 4 felt he had a problem controlling his playing from an early age. "I would play it tons, right. And obviously, you know, parents were concerned. Like, 'Oh, man, you're brushing off your school and your responsibilities to play a video game. Like, this is a problem." His parents put a lock on his computer gaming time but within six months he had secretly figured it out. "So that's kind of when I knew, 'Maybe this is a problem for me." His parents did not catch him playing when he shouldn't, indicating that it likely wasn't allencompassing. He talked about doing well at school and going out in the neighbourhood with friends. However, that came to an end.

He experienced a dramatic turning point into heavier gaming. Aged 12, he suffered a series of traumas that drastically affected his experience of life. Some neighbourhood kids repeatedly attacked him, at one point pulling out a knife. "Anytime I went out during that summer, because it was during the summer, I would always have a conflict or something would always happen because they knew where I lived." He suffered a head injury, after which the doctor ordered him to stay isolated in a dark room for months.

The injury led to memory loss, which then made school difficult and stressful. "The head injury stuff was kind of the catalyst. ... So I always felt stupid in school because I couldn't memorize things the same as everybody else. So I was really stressed out and then honestly depressed about it." His mental health was declining and he felt insecure among his peers, both due to the trauma and feeling unable to compete academically. "There's a reason I like playing these games, because then I don't have to think about what's going on around me, that's out of my control that I'm trying to control." Gaming became his escape from the stressors of education and, like Participant 1, his bullies. Reflecting on his choice of avatar, he used the phrase: "[I like to] do tons of things in order to survive." Perhaps to some degree he was playing out his real-world trauma responses through the games.

Participant 3 was already experiencing challenging life situations when he began playing:

[3] I was a social outcast in high school and that's probably a big portion of it. ...

The first high school I was in, I was having all sorts of troubles at home and I did some terrible things. ... Eventually I had to go work for my dad for like a year. It was the worst thing ever.

He did not go into any more detail as to the troubles at home, so it's unknown whether these mirrored Participant 1's in any way. But as a teenager in a new school, Participant 3 made a new best friend and found a relief valve for the pain of social awkwardness. "And then, [we were] still feeling very social outcasts at school, but I had this buddy who was into this stuff." Gaming began as a way for him to hang out with his new friend and then extended into a new, safer social environment.

Neither of the two female participants mentioned adverse childhood experiences. Participant 5 was more reticent in what she revealed about her personal life. I tried to fill in some of the gaps in her story based on allusions she made. Similar to Participant 3, social awkwardness and isolation may have played a part. For instance, she described not having a significant romantic relationship until her mid-twenties. She stated, "I was definitely missing a lot in my life and that's what drew me in deeper." Although she did not go into detail, she reflected on escape and avoidance as important elements. In describing what may drive people to game problematically, she stated: "Why is that character addicting? Oh, one, it is probably avoiding the stuff you don't want to look at in your own life."

Participant 2's experience does not fall into the description of an adverse childhood experience. Instead, at around twenty-years-old, her university degree ground to a halt when she had to apply for mandatory internships.

[2] I received many refusals. So I couldn't continue in my degree. So I had to stop. And at the same time, I couldn't find any job. And I think it was at that moment that I started to be addicted to my game.

She had been playing for several years up to that point, but it wasn't problematic for her until she lost her trajectory in university. Whereas others such as Participant 1 and Participant 4 gamed to avoid other people's actions, Participant 2's stress directly came from a void or lack in her life. She became stuck in the real world, but she could move forward in the game.

Low Self-Esteem as a Vulnerability

Unable to move forward in her education or career, Participant 2 found an outlet for her natural inclinations as a leader and organiser, along with a way to meet and socialize with people from all walks of life. However, because she felt stuck in her real life, the game took over. "I stopped searching for a job, I stopped searching for continuing my studies. It was a kind of place that I was able to hide." Other people can get stuck in their degrees and careers and not turn to gaming. What may have made the difference for Participant 2? "I think my self-esteem was low. And it was easier for me to stay on [the] game." In the online environment of WoW, she could be confident and truer to her personality.

Participant 5 spoke about the appeal of embodying another person when her own self-esteem was low. Through games, she felt she could build up her self-esteem through skills and social roles. She could see herself in a different light.

[5] So you can even be somebody else, as somebody who's having more fun, and is doing more cool things, and has some magic involved or is a really good sniper, or a really good football player, whatever it is. ... Especially when you're in points where you have lower self-esteem. Especially as teenagers and that, that's pretty powerful. But like, they're better. They're better than you. So why would I play the worse me? I'll play the better me.

For Participant 4, his academic experiences after the head injury severely dented his selfesteem. [4] You know, the god honest truth is, with the head injuries and stuff like that, I always thought I was dumb. ... It's just, you know, self-esteem, being treated like you were stupid, even by teachers. ... That was a big thing for me.

Participant 4 also brought up self-esteem when speaking about helping young people struggling with PG. "Do they have self-confidence? Do they have self-esteem issues? That's a huge one. And that's one that really rings with me, is self-esteem."

In the next theme, I describe participants' motivations for social recognition as a source of their PG. That desire for social acceptance may also stem from low self-esteem in their real lives. Participants 1 and 3 both speak to social rejection and isolation in the real world. Socially outcast in their schools, it is likely that both struggled with low self-esteem as well. Rather than a root cause, low self-esteem seems a marker for other personal struggles. The combination of adversity and a lack of self-esteem from previous experiences may combine to make someone vulnerable to PG.

Hyperfocus

Participants' gaming intensity showed up in different ways. The WHO's definition is intentionally broad for this reason. However, during their PG, participants all gamed intensely in some way. Participants 4 and 5 both related it back to "addictive" or "obsessive" parts of their personalities that come out in many aspects of their lives.

Participant 4 believed that intense gaming was a natural extension of his personality. "My problem is like, with the training, it then becomes an addiction for a while. So I swap addictions constantly.... This is how it usually goes for me, is I go from one extreme to another." When we spoke, he was playing World of Warcraft just to make money bartering items on the eBay-style social economy.

[4] It just becomes essentially what a gambling addiction is. So it's like, let's see if my little investment can make me a good return. It's not healthy, I know that, but at least it's not real money.... I've started playing the market and stuff, and I started off with, I

think, like 5K or something like that. I'm now over 100K. Just in, I think four days, five days, I did that. So that becomes the addiction for me, is just seeing that little gold number go up.

Participant 1 related to the in-game mechanisms for achieving something. "The game gives you a little jingle and a chime like, Congratulations, you won the fight, you did good." Participant 4 went further in blaming game companies for designing potentially harmful games. "[Diablo Immortal] is very predatory in the way that currency is spent and currency is bought.... I knew dudes spending \$5000 real money on an online game." He stated he has always been attracted to the numbers side of video games. They feel real to him, and give a sense of accomplishment. "It's ones and zeroes, but those are *your* ones and zeros."

Participant 5 related her problematic gaming to her recent ADHD diagnosis. For her, it seemed a moment of epiphany, where her habits and obsessive play suddenly made sense.

[5] Probably like this last year that I learned that I actually have ADHD, so it's basically hyper-focus area. So hyper-focus means nothing else exists. So with school this past term, it was more about the 'I need to draw all of these things for this art course' and nothing else existed, and I'm not sure I ate on Sundays. Same deal, but with games.

This obsessive personality or hyper-focus seemed to find a niche in gaming. Alongside adverse experiences growing up, it may have made them especially vulnerable.

Escape into a Better Identity

Participants chose avatars that allowed them to get what they needed from the game. All participants sought to fit into the online avatar community and play a role that was meaningful to them. For Participant 4, playing an avatar allowed him to leave behind his isolated, awkward real-life self and start fresh. "My thought was, I can be someone else.... In reality, I was a very quiet, sort of meek guy, and then in the game I could essentially be who I thought I wanted to be." In this subtheme, I explore how participants used avatar identification as a means of escape from their real selves and a world that felt unsafe.

Participant 4's bullying and health issues pushed him towards gaming:

[4] So that kind of set me into a locked-in prisoner in my own house. So that's when I really started gaming, because that's all I could do without [going anywhere]. And then being able to live a different life through a character.

However, he sees two parts to it.

[4] I think my childhood did play a role in the reasoning why I wanted that escapism. But that's kind of the main reason is just like, 'Oh, this is fun. This is something that I enjoy doing. So I'm going to do it to the extreme.'

Therefore, for him the external reasons were important but not the most important. He would likely have become an intensive gamer anyway. Perhaps his traumatic experiences may have differentiated what would likely have been intensive healthy gaming from problematic gaming.

[4] You have people like myself who take that escapism to an extreme and just don't want to deal with reality because reality is scary. And this game isn't, because it's black and white, right? I think that's what it comes down to is video games are black and white, reality is abstract. That's scary.

In that quote, he described engaging in escapism "because reality is scary." His worldview seems to have been shaped by his experiences of bullying and being attacked as an adolescent. For Participant 4, it was a combination of his obsessive personality and his fear.

Participant 3, who had described his three main archetypes of avatar, merchant, warrior, and female rogue, reflected that they may have allowed him to escape himself.

[3] So these characters or persona, how they move, the things they say, and the things they do, are totally opposite of who I am. I think maybe even, you know, thinking about it I probably even chose those characters because they're so different from who I am.

Here he does not create an explicit link between escape, avatar choice, and the self. There are several possibilities about why he explicitly created characters that were the opposite to himself, including exploration. Yet within the wider context of his adverse childhood experiences and urge to escape through gaming, he may be trying to escape personal shame, low self-esteem, or other discomfort in his own skin.

Participant 1 found that he chose avatars that he could relate to. "Especially as a child, I was taking on the persona of a main character that was very strong, as opposed to me where I felt weak and helpless in my life." However, not any strong character would do. They had to start out in the game as vulnerable and powerless, like himself:

[1] If the main character was this big, like top dog kind of thing, you know, like most of the superhero games and stuff, I didn't have a lot of interest just because I couldn't relate to their struggles within the storyline where like, I would kind of view myself as someone who's bullied, kind of the underdog. So like games where the main character was more the underdog, or faced a lot of like pressure or barriers in the storyline, in terms of like other characters or events, things like that, where they're being pushed back, you got to get stronger to push forward. Those games are the ones I really identify with.

For Participant 1, living through a resilient avatar must have felt like freedom.

Participant 3 described how his connection with avatars identified as he became more and more involved in social roles and quests within the gaming worlds.

[3] You are a part of that character, you basically immerse yourself right into that. And I remember so distinctly, especially with the Ultima Online one, like that feeling like I wasn't here, like I was gone. I was a part of that world and I was so bloody immersed in that character, that I couldn't see the world around me, it was crazy. And from a physical aspect, like I don't know, but from an emotional -- from the feeling of "I am that person."

Participant 1 loved the feeling of total escapist immersion as well. "I felt like I could escape into this video game into a completely different world, take on the persona of someone completely different." His description here creates a paradox of his other statements that he only chose avatars whose situations resembled his own struggles. It seems that he would find a character that he related to and completely leave himself behind to become that persona. In intensive episodes, he spent every available moment in-game:

[1] I'd be playing the video game about 5pm, eating whatever quick convenience food I could find or make within five minutes. And I would play that right till about, oh, geez, probably 2-3am. Get up at 6am for work. And then just rinse, wash, repeat.

Participant 2 wanted to be a leader. "I was proud of my character because I played well. I played a range. So it was good for me because I was leading my roster, so I needed to be out of the fight." When she became stuck in her real life, unable to move forward in her academics or get a job, her avatar was the outlet for her competitive drive. "I was the leader and I was telling each person what they have to do during the night for each boss and the strategy and the position mentoring, etc. So it was a huge thing."

Participant 5 took on a similar leadership role, but in a lore-keeping position within her guild. "I like being some of the characters that know all the things." She speaks about the ability to improvise and act out a role:

[5] But there's still different times where you're really focused on how you're going to portray that character and what different aspects of yourself you want to include or different aspects that are outside of that you wanted to try and experience with it, like I guess what actors are like, 'I want to have that role because it is gonna challenge me and make me think differently.'

In an example that meant a lot to her real-life identity, gaming allowed her to begin exploring her sexuality in a safe environment: "This was the first character where I was romantically involved with another character as well. So I got really into it, especially since I was

a late bloomer and had never really had an actual relationship." Her avatar became a safe surrogate in which to have a relationship.

Participants' choice of avatars and games seems directly related to their real-world challenges. Perhaps their avatars allowed participants to be who they yearned to be. Exploring alternative identities may be commonplace for any RPG gamer; however, participants in this study did so with the backdrop of adverse experiences, low self-esteem, and social struggles. As Participant 5 put it: "[Your avatars are] better. They're better than you. So why would I play the worse me? I'll play the better me." A harmless pastime for those rooted firmly in a secure real-world identity might become dangerous for those who are trying to escape their actual selves due to adverse or traumatic experiences. Embodying a specific type of avatar, in a particular type of virtual environment, allowed participants to temporarily fulfil their unmet real-world needs.

Social Identity Needs Driving Avatar Immersion

In the previous theme, I documented participants' initial experience of gaming and avatars, and how they shifted from harmless exploration to an escape from real-world adversity. In this theme, I continue participants' stories of avatar identification. Participants described the intensity of their gaming experiences and how they took priority over almost all else in their lives. They were driven to extreme playing by the lure of social acceptance and recognition within virtual avatar communities. At a certain point, the consequences of their gaming on their real lives became unmanageable and they had to contemplate a way out.

Leaving the Real World Behind

Barbara and Haselager (2020) postulated that avatar identification in PG can lead gamers to substituting their real selves into virtual avatars, with significant sacrifices. Several participants mentioned the vicious cycle that gaming created: the more they invested in the gaming worlds, the more impact it had on their daily lives, and then the more they wanted to escape into their avatars.

Participant 1 reflected: "And it would make me dive deeper, if you will, where I would stay up late, try to sneak a few extra hours playing video games, so I'd be more tired for school." His story most clearly showed the relationship between the struggles of his real life and why he immersed himself in games. For him, the real world was made up of bullying peers and fighting parents; it is understandable why he wanted to escape. That urge became automatic. "As soon as I came across any sort of life stressor, video games would be my first go to." He put more and more resources into his gaming life, to the detriment of his real self. "At first I thought it was helping me but in the end, it was actually harming me because I was losing a lot of social skills." His gaming habits created a downward spiral of mental stress, missing sleep, lying, and isolating, so that he became less able to cope with the real world.

Participant 2 gamed to extremes because she was stuck in her education and career, and she became more stuck the more she gamed.

[2] So it's a vicious circle, like you start on [a] game, and because your health is declining you continue because you're good at it, but you're not good at life. So why do you bother yourself? Continue what you're doing great.... I stopped searching for a job, I stopped searching for continuing my studies. It was a kind of place that I was able to hide.

What she hid from seems to be the stress of being stuck, or what that means to her. Others in her position likely found alternative paths, healthy or unhealthy. She had established WoW as a safe place to explore, socialize, and compete. She was "doing great" there, so it became an obvious if irrational path to pursue. Unfortunately, gaming achievements do not translate into the real world and her success in-game ultimately frustrated her ability to move forward.

Throughout many of the interviews, I noticed a recurring theme of substitution.

Participants made good on their hopes of escaping their lives by immersing themselves in their gaming world so deeply that it became more important than real life. For instance, Participant 3 would become completely immersed in the world of the game for months at a time:

[3] I remember so distinctly, especially with the Ultima Online one, like that feeling like I wasn't here, like I was gone. I was part of that world and I was so bloody immersed in that character that I couldn't see the world around me, it was crazy. At various points in our interview, Participant 3 described the length and intensity of his immersion in gaming worlds. In the quote above, he notes that his real-world self was, in essence, "gone." He had substituted his awareness and his self-embodiment into the gaming world.

Participant 2 described a similar experience of substituting the real world for the game: "So, my real life became my game life." She went on to explain how she rooted her feelings of self-worth and personal accomplishment almost exclusively in WoW raiding and leaderboards. "When I was addicted, everything was laid on the video game. If I was successful, it was because of the video game." Participant 2, who had noted that low self-esteem significantly contributed to her PG, seemed to substitute her self-esteem from the real world into gaming avatars, where she felt good about herself.

Participant 1's gaming and real-world selves overlapped in a unique way. He shared a story from after his parents' separation and his move to a new school:

[1] After about two months, one day on the playground, I remember it because it was a pretty big deal. Kid was pushing me around, pushed me to the ground, took my shoe. And in a moment, I remember thinking about the video game I'd played. And I remember like, oh, well, I'll just, you know, push this guy. And so I pushed him, he got up. He got more upset, so he went to push me again. I ended up attacking him. So I punched him a couple times in the face and then kicked him, pushed him away. The playground monitors, or the adults at the school like while the kids are out at recess, they didn't see him initiate the pushing. And, you know, taking my shoe and throwing it at me. They just saw when they turned around me, as the bigger kid punching this smaller kid in the face and then kicking him and then him subsequently crying. So I got into

trouble. The school threatened to call the police, get the police involved. I was very young, so I was terrified. I was in the principal's office getting yelled at, all that. And from that moment, at that point, I ended up escaping heavily into video games, where that's all I could think of for almost half a year. I didn't think of anything else, I didn't see friends, didn't talk to anyone at school, if I was able to or allowed to. I'd have the old disk Walkman, put headphones in, just so I could tune everything out. My entire train of thought from day until night was all about the video games I was playing.

In this story, Participant 1 took inspiration from his video games, in which he could play out an underdog character and become successful and accepted. However, embodying his avatar in a moment of stress did not help him in the real world in this case and he took that to heart.

Instead, it created a situation in which he felt further need to escape and his gaming became all-consuming.

Seeking Acceptance and Status

Several participants described social motivating factors for their PG. They experienced an intense lure for real social recognition within avatar communities. This recognition could be real (from other players online) or imagined (from NPCs and storylines). All participants highlighted significant social factors in their own ways. It seemed that in the background of real-world adverse experiences, status and acceptance were key forces in driving their PG. Avatars became a way to feel a sense of social acceptance and status.

Participant 1's story highlights the connection between adverse real-world experiences and the lure of social safety in gaming. After several years of constant fighting, Participant 1's parents broke up. His father began abusing drugs; his mother raised him alone and worked several tough jobs just to make ends meet. They moved provinces and Participant 1 entered a different school, where he knew no one and was bullied for his weight. "[Gaming] starts out as a pacifier, but then it almost inadvertently develops into a coping mechanism." Feeling helpless in his own life, he sought out avatars that reflected his own situation.

Underdog game characters became a way for him to play out his own story in a place where he could succeed. His characters both resembled himself and offered the opposite embodied feeling to reality:

[1] You're not powerless, like [with] bullies at school, where I couldn't do anything, I was too big, I was too weak, or they were much bigger than me. In the video game, if someone attacks you, you can fight back.

He found a feeling of safety through embodying a more capable, less vulnerable version of himself.

For some participants, the feelings of confidence and influence through their avatars were directly related to social acceptance. Participant 1 and Participant 3 especially had a strong drive to achieve social recognition through virtual worlds. However, while achieving the same ends, the way participants interacted with the gaming communities differed significantly.

Participant 3 was a self-described social outcast at school. He began gaming when it was much less mainstream than today, and in the games he found a similar, accepting social group.

[3] I was able to fit in in a way that I could or wasn't able to in real life and be able to talk to these people, sort of on the same level, because a lot of these people, at least during that time, were sort of in the same boat. ... I'm able to be social in a place where it feels relatively safe.

The gaming worlds opened up a social sphere unavailable to him otherwise. They contrasted the anxiety he felt about real-world socialization.

Feeling unsafe at home and at school, Participant 1 also experienced acceptance through the in-game community.

[1] You start feeling like you're a part of the community, this virtual, artificial community. You feel you're part of it and you're accepted. There's no prejudice, there's no nothing, there's no discrimination, you are wholeheartedly accepted, so long as you're

holding the controller pushing this main character around. ... Nobody's calling me fat or fatso, nobody's making fun of me. I don't have to listen to people yell.

The game became a direct safe space in comparison to his real-world experiences. While at other points he spoke about the urge to do something great through his avatar for the in-game social praise, the need he spoke to in the quote above is more basic. He was looking for simple acceptance. The volatility of his life and his vulnerability made him especially vulnerable to trying to create a new self who could be okay in the world.

In contrast to the other participants, who connected with real people through games, Participant 1 referred to offline, solo role-playing games. He tried MMORPGs like WoW but did not like them. Therefore, unlike others who played MMORPGs, the communities there were fictional, populated by non-player characters (NPCs). Yet his imagination filled in the blanks and it meant that no one could hurt him. Even though it was imaginary, he felt driven to attain acceptance and camaraderie from the NPC communities.

Having started out as a pacifier for Participant 1, video games continued as emotional support. For instance, in his early twenties, he lost a close friend to a horrible work accident. Playing and replaying his friend's favourite video game, Mass Effect, became a way for him to relive memories of being with him. "And as I was playing them, it was like flashback memories of watching him play or like helping him play a spot that he would get stuck in and stuff like that at his place." Unable to process his grief in real life, he could grieve while playing. Mass Effect had a specific emotional connection in this instance, and he ended up playing all four games through to their end four times each.

Even if the games did not have a specific tie to a person, they were still his way to grieve for other loved ones who passed away. "I would process it in my own way where I'd be in a quiet room just focusing on something. And quite honestly I would be crying while I was playing the video games, because I'd be thinking about the loss of the family member." Having shielded him from harsh and aggressive behaviour growing up, games became his safe place to reflect, to be

with his emotions, and to express them. They helped him connect with himself and his feelings for his loved ones in a way that felt safe.

Stuck in her real life, Participant 2 sought socialization, achievement, and competition. "I was the leader and I was telling each person what they have to do during the night for each boss and the strategy and the position mentoring, etc. So it was a huge thing." Participant 2's PG resulted from a confluence of three elements: she already enjoyed the game, she got stuck in her life, and she did not have the confidence to pursue real-world alternatives to her obstacles. Instead, she developed herself as a leader and competitor in WoW.

Being competitive and being seen as a high achiever was a key driving factor for several participants. To continue with Participant 1, his choice of character did not only reflect his needs for safety and emotional connection. Gaming worlds allowed him to not only feel safe, but to feel recognized.

[1] So the games I really enjoyed were definitely the games where the main character in their storyline is portrayed as they're the underdog, or they're just a simple nobody. And you're striving to accomplish a great task or save people. Things like that.

Do something that's actually mentionable or noticeable, things like that.

He seemed to be seeking what he did not have: to be noticed and valued. By obsessively playing a virtual character who resembled himself, he could transcend his circumstances.

Initially drawn in by social acceptance with similarly socially-awkward peers, Participant 3 found that gaming provided a world in which he could succeed.

[3] You start to get deeper and deeper into it, because that's where you fit in, that's where you feel comfortable. And of course, then you get the achievements and that feeling of being successful with things that are easy relative to real life, right.

He was the opposite to Participant 1. Solo games were not an issue for him. "Single player games just don't do that. Not in the same way." Ironically, Participant 3 would play MMORPGs in solostyle to achieve the feeling of social status.

[3] Thing is, I didn't even play with a lot of other people. I often played alone. But there's still this feeling like, if I can get this done and I get this high in this experience level, people are gonna look at me in the game with respect, or this idea that I'm gonna be better than them or something. Or like, 'That guy, I can't believe it. He's got experience level 12.' Or whatever, I don't know what the levels are anymore. He's got experience level 12 in exploration. He really is dedicated to put that much effort into mapping out something. And people are like, 'Well, I would never do that, you know.' So it makes you feel special, makes you feel like you can accomplish something that other people can't. Whereas in the real world, it's a lot harder to be that person that is better than other people, than everybody else, or even some people at certain things.

He too seeks that recognition of accomplishment and value within a community, just in a slightly different way to Participant 1.

In our interview, I brought up the image of the wandering hero in myths and legends returning out of the wilds. He distilled it down to status: "I remember I spent a lot of time in those areas and in the hardest possible ways [of playing], so that I can get more than other people." Participants seemed to want to stand out, and felt they could do so in games in a way that was impossible or inaccessible to them in real life.

Participant 3's experiences relate to Participant 2's, who also found in-game achievement easier than real-world achievements as a young adult. While she did not talk directly about recognition or status, she was driven to play obsessively by the promise of social success and achievement. "When I have the goal to be on the leaderboard, I play until I am on the leaderboard." This may relate to a need for recognition or simply to a goal-oriented, competitive streak within her.

Of the various drives and desires that participants experienced in their problematic play, social goals stood out most prominently. Participant 1 sought a feeling of safety through NPC communities that could not harm him in a real way. Participant 3 put countless hours into

achieving levels and accolades that distinguished him from other players. Participant 4 stated that one of his biggest lures into obsessive gaming was: "Not knowing where I fit socially. And that's still a problem to this day, knowing where I fit socially." In the game, he could fit in and express himself freely. Participant 2 and Participant 5 both found social leadership roles within their online communities, which they engaged in to the detriment of their real-world lives. When speaking about their avatars, participants spoke extensively about what that meant to them on a social level. Participants used avatar identification to enter into a social environment that felt safer to them. Avatars helped them achieve social recognition in contrast to their feelings of isolation and awkwardness in the real world.

Long Hours

As participants began to substitute reality for the gaming worlds, they spent immense amounts of time gaming. Participants 1-4 all spoke about long hours dedicated to games during their PG. Participant 2 stated, "I played 16 hours a day, every day of the month." Participant 3 estimated it was "12-to-15 hours a day. Easy." These estimates indicate an extreme amount of time spent on the game. Considering the avatar identification and real-world substitution they were experiencing, many of the participants felt it was natural at the time to spend so much time gaming.

In the following quotations, Participants 1-3 all described the singular focus they had while gaming. For Participant 1, it could be days without a real break:

[1] I could play them for hours, like 8-12 hours, no problem. That's no problem at all. Weekends, especially, you know, you start playing at like 6-7pm after dinner, keep playing through the night until about 3am, till your eyes are almost burning. And then you realize, 'Oh, I should probably go to bed.' Wake up the next day: rinse, wash, repeat, do it again. And to me, I enjoyed it. I thought it was totally fine.

Such periods of time would leave little left for self-care, sleep, and holding down a job. Almost all of their energy, drive, and focus at this time must have been committed to the game.

Participant 2 described her days similarly: "So we played and this is when I start to play from the morning when I wake up until the night until I fall asleep. And so I took my breakfast at my computer, my lunch, my dinner." To facilitate this lifestyle, she convinced her then-boyfriend to join her in the game and play to a similar extent. They eventually broke up, but she kept playing.

During his intense gaming years, little else mattered to Participant 3:

[3] You wake up in the morning, it's the first thing you think about. And when you feel like you're forced to go to bed because you have no other choice, because you can't get your eyes open, it's the last thing you think of before you go to sleep.

Participant 4 found that to be a successful dungeon raider in WoW, it demanded long hours of errands. He needed to spend most of his available time on the game to achieve his ingame goals:

[4] It became a full-time job, because you're only raiding two nights a week. But then you have to get -- oh, you have to make sure you have all your potions and all your nonsense for the raid. So you end up spending seven, eight hours just farming material to make the things that you need for the raid. So it became a job, essentially.

Participant 4's description of raiding as a job does not seem to just relate to time spent. Raiding happens in groups, where every player has a specific role. Success engenders social status and character rewards, while there are social consequences if you do not show up. He explained that besides the thrill of killing dungeon monsters, it also involves boring grunt work. In several ways, it transplanted the inherent sense of purpose of a profession.

Participant 4 then reflected on the overall amount of time he had spent in the game. "So World of Warcraft, between all of my characters something around the mark of, logged-in time, probably three to four years." Three to four years of *logged in time* is an incredible amount of time. As an example, playing eight hours a day, every day of the year (and therefore more than a job), it would take someone nine years to get three years of logged in time. Participant 4 had

been playing intensely for over fifteen years, so it is possible, and eight hours was below the others' daily estimates. Either way, his guess speaks to the extraordinary amount of time he has spent gaming. Considering Participant 1's and Participant 3's descriptions of their decades spent playing, they likely have logged similar amounts. Participant 5's PG lasted several years and she did not describe her hours. PG definitely took significant time and resources from four participants, and likely Participant 5 as well, considering she classed herself through the WHO's guidelines.

Participants not only used significant amounts of their time but also devoted their mental drive and energy to gaming as well. The amount of time they spent in the game, living as their avatar, meant that they likely "lived" as much or often more in those worlds. They spent more time as their avatar than themselves. The substitution was as complete as it could be. Was it fulfilling? Was it enough? And what were the consequences of substituting their lives into the game and trying to live through these idealized avatars? The next sub-theme explores the results of that devotion in their lives.

Consequences

Unsurprisingly, participants' long hours gaming had real-world consequences. Their PG harmed their health, their relationships, and their careers.

While gaming took Participant 2 away from her studies and career trajectory, it also impacted several other participants' education. Participant 1, who still struggled with bouts of PG at the time of interviewing, found it could be a big distraction from the university coursework he had recently begun. "I'll just play an hour, to kind of decompress from the day and then start schoolwork. Well, it turns into about three, four." While his gaming seemed more contained now, he still had poor daily management of it and it could affect his real-world responsibilities.

In a similar vein, Participant 3 believed that his gaming put his education and career back decades:

[3] I probably would have finished college way younger.... I was so sucked into that world, and it was so hard to get away, that even going to class was excruciating. I'd be sitting in class going, 'God, I just want this to be over with so I can get home.' ... So I'd go for a couple months. And then I'd just, I couldn't. I couldn't maintain that mental threshold of what I was doing at home, playing whatever I was playing, in whatever relationship I was in, and managing to go to school. It just wasn't, I could not function with those two things at the same time.

His quote here links with Participant 4's previously stated comments about gaming feeling like a full-time job. Instead of pursuing a career with engineering or computer technology, Participant 3 worked as a bartender for years, a low-key role that allowed him to immerse himself in gaming the rest of the time.

He also reflected back soberly on the impact gaming had on his relationships. "I couldn't maintain relationships. I couldn't maintain friendships. I still struggle to maintain friendships. And you know, I can pretty much guarantee that I probably would still be married to my first wife." Through his reflections, he painted an alternate universe picture of himself, without gaming: married, university-educated and driven to succeed in work. It is, in fact, the life he had at the time of interview, only as a fifty-year-old.

Participant 1 found that he isolated himself so often that he lost many friendships. "It has a huge impact not just on work and school, but like your loved ones. I lost a lot of friendships just because I stopped talking to people." In our interview, we discussed how diving into Mass Effect to grieve his friend meant that he missed out on spending time with those mutual friends who reached out to him. "Ironically I was isolating myself to relive memories with someone." The game worked in the opposite way to how it felt to him in the moment.

As well as grieving his friend, Participant 1 used games to process difficult emotions growing up, such as anger, frustration, and loss. Initially these coping mechanisms seemed to help him regulate his emotions. For instance, he would go to school or work the next day having

gotten over the interaction that had upset him. However, as he got older he began to realise that gaming wasn't an actual healthy coping mechanism for real life. For one thing, he needed the game to process.

[1] It also backfired. Because when you get into a heated argument or discussion in real life, it's not like you can just pause and be like, hang on a second, I'm going to look online to see how I can work my way through this in the most optimal manner. You're stuck in it in the moment, and there's no real walking away. And if you walk away, that could upset the other person or that just ends the situation. And it may not be in your favour. So I did find, at first, I thought it was helping me but in the end, it was actually harming me because I was losing a lot of social skills. And I was losing how to deal with social situations in a healthy way.

The coping mechanism Participant 1 had established and used for years had helped him through difficult times, yet also became a hindrance to building real-world relationships.

Gaming negatively impacted Participant 2's health. It likely did so for the others', as well, considering the long hours sitting in a chair staring at a screen. Participant 2 stated: "So, yeah, I start to gain weight. My activity was very low; I was sedentary.... My health was declining. But it didn't bother me." The final sentence of her quote here ("But it didn't bother me") resembles Participant 1's memory when describing his long hours gaming as a kid: "I enjoyed it. I thought it was totally fine." It seems that participants did not initially notice the consequences of their problematic gaming habits. Their avatar identification and immersion into the virtual world meant that their in-game accomplishments outweighed any real-world discomfort.

The consequences of their gaming fuelled participants' further escape into it. More intensive gaming meant more life struggles, which created a downward spiral. However, ultimately the consequences also motivated participants to change their lives.

Breaking the Identity Bond to Move Forward

Participants immersed themselves in RPG avatars to escape real-life stressors. However, the time and energy they committed to their characters, achievements, and virtual communities worked in the opposite way they wished. Instead of meeting their real-world needs, their PG increased them. In terms of avatar identification and self-discrepancy theory, their ideal and real selves moved farther apart the more they immersed themselves in the false ideal self and neglected their real selves (Higgins, 1987; van Looy et al., 2012). To move on with their lives, they needed to detach from their avatars.

As we explored the impact of their gaming, some participants described the feelings of loss when they stepped away from the gaming worlds, whether temporarily or permanently. All of the time and energy they spent gaming ultimately meant little in the real world. Their lives went on and at some point they had to face that.

Participant 3 felt a sense of emptiness when trying to step back from gaming. He described the loss he experienced:

[3] When you get up and you realize, 'Okay, well, I need to do something else,' sort of this feeling like, 'I need to take a break from the game,' and you realize there's nothing there. Like you realize all this, like, you'll spend three weeks, four weeks developing this character in something like Skyrim, or an MMO or something, and then when you finally decide, 'Okay, I needed to take a break,' or 'I need to do something else,' it's almost like this vacancy.

In this quote he described the vacancy that he felt without video games. Throughout our conversation, there were moments where I sensed what seemed like the loss he felt for the many years he spent on games. Now thirty years later, he has gone back to do the academics that he couldn't as a young man. There was a feeling of wasted time chasing a dream that proved insubstantial. He had to let go of his avatars, the three archetypes of merchant, warrior, and rogue, and all his accomplishments through them, to see who he could be in the real world.

Participant 1 felt angry and resentful when his gaming identity was challenged. "At first, when I was going to counselling and video games were being identified as a disorder, I didn't like it, of course. I was like, 'Who am I outside of video games? I have nothing." His anger may have stemmed from that sense of loss and fear. He had been transplanting his self-esteem and sense of security into a virtual community, and suddenly he faced being alone.

The vacancy would make it harder to break the cycle of PG. Participants faced the loss of character and communities they cared deeply about and had invested years of their lives into. Significantly, it had *felt* real to them. Participant 3 his internal confusion when giving up his avatar's achievements:

[3] Probably just natural as a human being when we go and we saw a bunch of wood, we expect to see a pile of wood there. It's probably natural in our brain when we've done something like playing these games, and we've got this beautiful armour and we've got all these accomplishments and then we tell our brain, 'Okay, well stop thinking about that.' Your brain's still searching. Well, where's all this cool stuff that we've got? Where's all these achievements?

The process of substitution had taken massive amounts of time to develop and maintain, and so it would not simply dissolve.

Participants had to grapple with a loss of identity as well as the consequences of their neglect. Looking for work in her early twenties after being on benefits for several years, Participant 2 whimsically considered adding her guild leadership role onto her CV. "I knew at that time video game[s are] not something you can put on your curriculum." Participant 3 experienced a similar displacement. He gamed so intensely, so immersively to gain a sense of status and accomplishment, but it was all fake. For him, it wasn't work achievements so much as the social status he desperately sought. "It doesn't give you social capital. It doesn't." This realization seemed to hit him hard.

When trying to get himself out of a PG episode, Participant 1 would rationalise the reality of the situation in comparison to the connection and meaning he felt.

[1] It's all ones and zeros. What am I gaining? Yeah, okay, I've amassed like a million in-game currency dollars, but what does that mean? That means nothing. If I hit delete on this one file, it's all gone anyways.

Let us return to Participant 4's estimate of three to four years of logged in time spent on WoW. That means that he lost years of his life to something that didn't matter in the real world. It seems a similar experience to what I see in my work with drug and alcohol abuse clients in a treatment center. They need to face the triad of changing their behaviour in the present, addressing the unresolved underlying factors that made them vulnerable in the first place, and the guilt, shame, and loss of what their behaviour has cost them in the real world.

To return to the real world and begin to manage their gaming, participants had to break strong habits and let go of identities they felt deeply connected to. These relationships, to their avatar and the real or imagined communities they inhabited, made breaking the downward spiral of PG all the more difficult.

Participant 3 described the combination of addictive behaviour and deeply emotional connection when quitting MMORPGs:

[3] It's just like any other addiction. I mean, I've had some drug addiction in my past, not for many, many years. I was a smoker for 25 years. I haven't smoked now for five years. But I can compare those same feelings of withdrawal, if not even maybe a bit worse for me. The withdrawal is very similar. And it's that feeling like I can never do this again. And it's that sadness that, you know, because some of those experiences are really amazing.

On the one hand, he knew he needed to in order to have the sort of relationship and career he truly wanted. On the other hand, the game world had meant so much to him.

The way he described it, it seemed like losing a part of himself. "Heartbreak. It's heartbreak. It's real sadness." For participants, leaving the virtual world behind meant wrenching themselves away from the avatar identities that had helped them feel safe and secure, and launching back into the uncertainty of the real world, where they had previously felt unsafe. It took courage.

Returning to the Real World

At the time of interviewing, all five participants still played video games. However, they had created boundaries unique to their gaming that helped them manage it in a healthier way. In this theme, I explore the various techniques that participants used to curtail their gaming. They found ways to re-engage with their real-world identity and relationships, reconnect with their values, and set real-world goals. Participant 2 described the core of this theme best when she said:

[2] And so the day I knew that I was enrolled in university and the company, I made the choice. I said to myself, 'It's either the game or your real life, because you're not going to do them both.' ... I was going to take back my life.

Her message is one of hope; in their life situations at the time of interviews, I saw that hope being fulfilled. As participants let go of their problematic avatar identification, they spoke about what helped them reestablish their real-world identities.

This section addresses the research sub-questions B and C. It begins with personal relationships: having partners and children made some participants shift perspective on what mattered most to them. As their relationships helped them reevaluated their priorities, they then had to set up personal boundaries to help them manage their gaming time. Participants also identified engaging in real-world activities to draw themselves out of the gaming world. Those sub-themes respond to sub-question C, *What has helped those with a history of problematic gaming move forward?* The section concludes with participants' reflections on sub-question B, *How might understanding a client's player-avatar bond help counsellors*

support individuals struggling with PG? According to some participants, nurturing self-awareness and gently coming into difficult conversations about gaming may help counsellors support those struggling, especially young people. Ultimately, the answers to the two questions are intertwined and prevalent throughout this theme.

Relationships and Boundaries

Several participants stated that relationships were a key factor in helping them manage their gaming habits. Key relationships helped participants put their gaming habits into perspective and better choose their priorities. Participants described the boundaries that helped them manage their PG; these boundaries were unique to their gaming style and personal vulnerabilities.

Participant 3 married and then divorced as a young man. His gaming played a major part in their split, though he only realized that in retrospect. Participant 3's new girlfriend gave him his first real wake-up call.

[3] I think where things started to change, and I started to realise how much of a problem I had, was after my first wife. I had met a new girl and we started dating, and we moved in together. And almost immediately -- the first thing that gets moved into my house, anytime I'm moving, is my computer, right? We could have nothing in the house. Furniture, you know, still on a truck somewhere, I will get my chair set up, my desk set up, and then I'll -- So I remember moving in with her. And almost immediately, I loaded up DAOC [Dark Age of Camelot] or whatever I was playing. And she told me later on, she's like, "Honestly, you sat down and you didn't get up for like six months. It was the weirdest thing I've ever seen." And I think back; my memory of it, of course, it's a big black hole. ... That was sort of that first moment where I went, "Oh, okay, well, maybe this is a big problem."

Participant 3 met his current wife shortly after that relationship, and he had gained a lot of insight in that period of time. "I think I directly told her, I said, 'I have a gaming problem."

Ultimately, he valued his romantic partnerships more than his gaming life. "I'll give you the number one reason [I quit gaming] is that I needed to be sure that, this time, I didn't lose the person that I cared about." Once it became clear that gaming was going to deeply impact any serious relationship he was in, he knew he had to make it a lesser priority. His honesty led to conversations about boundaries with his now-wife. "She's like, 'That's unacceptable. You can't just sit at a computer for that long.' So I started working through that process of trying to figure out how the hell I function in real life." These moments led to his renegotiation of his identity, returning to the world, and pushing through the "heartbreak" of quitting.

Similarly, Participant 4 finds that relationships are naturally a higher priority for him than gaming. "When I'm in a relationship, I don't do any sort of gaming, that kind of stuff." However, he recognizes that this may be his tendency to obsess over a particular thing. "I swapped from video games to a person ... I go from one extreme to another extreme." In his case, relationships acted differently than for Participant 3. Participant 4 seemed to use them as another opportunity to immerse himself in something, aligning with his self-described addictive personality.

Participant 2 and Participant 1 both spoke of the impact of their new responsibilities as parents. Participant 2 was very matter-of-fact when she said, "I have a daughter, she's two-and-a-half. So I don't see myself putting my game before her." She created strict time-limited boundaries around her gaming. At the time of interviewing and for years previously, Participant 2 played twice a week for a set time, and no more. She described being very conscious of how much time, emotion, and identity she put into her avatars.

While Participant 1's gaming fluctuated between abstinence and intensive episodes, he also realigned his priorities when his daughter was born.

[1] I'm older. I have a child. I have a lot more responsibilities. Can't let down my child. So I'll really rein it in where -- yeah, I might skirt doing homework or some other sort of thing like cleaning up the house or something like that. But I won't let it affect me

to the point where, you know, I'll stay up till four in the morning. My child gets up at 5:30, so I'm running off an hour-and-a-half sleep. Well, not only am I not interacting with her much, [but] it's kind of a hazard, because if she gets injured, I'm not in the right mindset to drive to the hospital, for example. So I'll be cognizant of that.

Participant 2's and Participant 1's children help them hold boundaries that, certainly for Participant 1, otherwise might have easily slipped. The consequences of playing too much suddenly became much more significant when it had a direct effect on someone they loved and were responsible for.

Participant 2 reflected that, "Today, my playing is totally different." As a fly on the wall, if you watched her game monitor now it might closely resemble her addictive playing: she plays with her husband in their guild, going on raids; she has a leadership role, something she has always enjoyed. Speaking about the present day, she stated, "When I play I want to be the best." This description is all very similar to before.

However, her boundaries distinctly differentiate her playing from her PG years, which to her makes it feel "totally different." She plays twice a week at a time arranged with her guild, for three hours each, rather than for untold hours every day. "I am competitive but not toxic," she stated. Her priorities had changed. This shift started a few years after she guit video games:

[2] I was back on the game because I was almost done with my degree. I was doing great. I was going to be in the company.... And so I said to myself, 'Okay, now you can rest.' ... I was strong enough to go back on the game without degrading my life.

Just as her life circumstances made her initially vulnerable to PG and avatar identification, now her circumstances buffer her risk.

Similar to Participant 3, she made a conscious effort to prioritize real-world relationships and responsibilities. "I reasoned with myself. ... I set up some rules for me, like, if you have an aperitif [social engagement]... you should go. Don't prioritise the game, just go, go outside, and then you'll see." She distinguished healthy from unhealthy gaming as where her priorities lay.

For others, a key difference in their gaming habits lay between solo or community-based playing. Through lived experience and outside feedback, some participants determined what types of games they could and could not play in a healthy way. For Participant 5, community-based games were generally positive for her. "Then you've got groups that you're connected to, like people that you start connecting to or that your character starts connecting to, so then you have friends, even if they're not friends here." On the other side, Participant 3's unhealthy gaming came out in MMORPGs, where he felt driven to achieve social status. For him, solo games became a healthier alternative:

[3] Single player games just don't do that [lead to PG]. Not in the same way. ...

There are times where I get right into something. I get excited about something and I know when to step back. But that draw isn't there. There isn't that social competition. He set himself a rule: "I can't play those kinds of games [MMOs]." Solo games he plays for pleasure. Therefore, limiting the type of game helps him regulate his gaming.

Participant 4 also found solo games easier for him to manage his time on. "So I don't really play with anybody now, I just do stuff on my own. And I can kind of limit how much I'm playing that way." While he described his current play as similar to a gambling addiction, making money on the online World of Warcraft marketplace, he was also going to school, socializing regularly, and working. He seemed to have found a way to mitigate the consequences of his playing by channeling it into less time-consuming roles.

Participant 3 and Participant 4's boundaries around multiplayer games reflect the specific nature of their PG. It would be different for Participant 1, who played solo games obsessively and had little interest in MMOs. Participant 2's situation (stuck in her career and education) significantly contributed to her PG; once she had resolved that, she could better manage her playing. Therefore, participants created unique solutions that worked for them.

Real-World Activities

All participants identified that they needed to re-engage with real-world activities and pursuits to help manage their gaming. In some ways, these pursuits helped them to meet the initial needs that drew them into gaming.

Participant 1 has used exercise as a healthy alternative to gaming. It has helped him fulfill social and emotional needs at various points in his life. For instance, after getting counseling as a young teen, he began playing football in high school. "Exercise was kind of a tandem effect, because obviously for not just my mental health but my physical health. I needed to exercise because I was very heavy." Football helped him address several issues that had pushed him to escape into an avatar.

Playing on the school team, he began to feel the community acceptance he longed for. "I wanted to be more active, I wanted to be stronger, so I could play better. I was getting gratification from my peers in a social group for once." Whereas PG created a vicious cycle, exercise and team sports began a virtuous cycle for him.

Later, running replaced gaming as a way for him to process the emotions and experiences of his day:

[1] Then you start processing, like, 'Why did that person yell at me today? That really pissed me off.' And then you just keep running like, 'Oh, yeah, that's because I wasn't paying attention. I almost ran into them with the forklift. Okay, yeah, no, that is on me. I need to pay more attention, be more cognizant of my surroundings.'

The process he described above is a near-replica of how he often used video games for emotional regulation. He replaced that reflection time with something active and with natural physical limitations compared with gaming. Whereas he described gaming as seeming to help him cope but ultimately becoming a crutch, exercise gave him a much healthier processing method.

For some people, exercise may pose many barriers. Positive parental associations helped Participant 1 get into it:

[1] That also correlates with some of my best memories, like with my father before he fell heavy into drugs when I was really young. He was concerned about my physical fitness, so he started taking me to the gym.... To me [the gym] is a safe space. This positive association helped him take the counsellor's guidance to exercise, as it reminded him of the times before, when he had felt safe and secure in his home life.

Exercise helped Participant 1, but ultimately it was not as strong as the ingrained connection between stress, emotions, and gaming. When he lost loved ones later in high school, he began to game heavily again and lost his place on the football team. "And even despite my enjoyment of the sport, and everything, those significant life stresses or family stressors, because they hit so close to home, I actually ended up pushing the sport aside in favour of the video games." However, he took the experiences with him. In his game episodes as an adult, he knows that exercise can help. "When I notice I'm in like a deep kind of rut, I mean a huge episode of gaming, sometimes I'd be like, 'No, I need to set aside some time to exercise. I know I'll feel better."

Participant 5 also found that organized exercise helped her. "Try to make sure that you have something outside of the game. Like for me I had my martial arts training, at least."

Likewise, Participant 4 agrees with the benefits of exercise to mitigate PG:

[4] So I've been working out, I've been doing stuff. And you know, the working out gives you more confidence. So I started to see, you know, how I was in game starting to leak out into how I was in real life. So, that was a bit of a change. And that's kind of when my gaming slowed down pretty significantly.

He described here the virtuous cycle of exercise boosting his physical well being and self-esteem, which were both risk factors for him. Working out may have given him more confidence going out in the world, in contrast to feeling he needed to stay indoors to protect himself after his adolescent attack.

Participants therefore cited exercise for a variety of reasons: to reverse poor physical fitness due to gaming, to get involved socially, and to build self-esteem. Depending on their reasons for gaming, exercise helped several participants to re-engage in the real world in a more positive way.

As noted previously, all participants were students at Athabasca University at the time of their interviews. They were therefore looking to progress or change careers. Participant 4 found he had a strong drive to help others. "Well, what makes you happy is I guess the question you have to ask yourself, and what a lot of people need to ask themselves, is what makes you happy and well, helping other people makes me happy." Through real-world pursuits and beginning a psychology program, his social confidence had been increasing over the previous few years. He felt less of a need to keep himself hidden in video games.

Compared to her days gaming problematically, in our interview Participant 2 stated she strives for in-game success but isn't attached to it. Her self-esteem is now rooted in the real world:

[2] When I was addicted, everything was laid on the video game. If I was successful, it was because of the video game. Today, if I am successful, it's because of multiple things. And not because of video games.

She developed a sense of security, purpose, and connection within the real world.

Participant 3 believed that pulling back from gaming allows a person to experience other positive things in life that can help bring them back into the real world.

[3] Coming out of it is hard. And the only way you're going to be able to experience something outside of that world is just to have that addiction just taken away. You've got to get rid of it, at least for a while.

Relationships helped him see and understand his gaming problem; stepping back from MMOs gave him perspective on his life and goals. As a fifty-year-old, he is studying and conducting

research with an NSERC award. While he does not state it outright, my sense is that his relationship and his studies keep him focused on the real world, less likely to drift back into PG.

Participant 1's video game addiction was a product of his upbringing, when he felt unsafe at home and at school. As an adult, he found that he could manage his own living and work environments so that he did not face the same stressors. "The biggest proponent of mitigating my video game addiction is definitely stability. Household stability, more specifically." He found a sense of freedom and relief in becoming an adult and moving into a place with a roommate, where it was equal footing. "It's not like they had totalitarian authority over me, where they set the rules and if I don't follow them, I get yelled at." Eliminating one of his primary triggers helped him feel safe again in the real world.

Participant 3 believed that gamers first needed to cut back and distance themselves from the game. Participant 5 took the opposite approach. She stated that it would be easier for people with a problem to build alternative activities first before trying to pull back.

[5] The connection with that game, with the character, when you're in that mode, it is basically an addiction. You're not gonna be able to say, 'Limit this' or 'Try this instead', it's more -- there's an overpowering connection there. Where it's really hard to be able to do much of anything else sometimes. So I think fostering those connections with other people, or like getting out of the house and going for a walk before you do anything else. Something like that connects them to the world will lessen that impact rather than focusing on trying to lessen [gaming] itself.

All participants agreed that prioritising meaningful social engagements and physical activities helped them manage their gaming. Participants 5 and 3 differed on whether they thought a problematic gamer needed to cut themselves away from the game first or not. The activities they noted seemed particular to their own interests and sometimes mirrored what they sought from the game.

Self-Awareness

Participant 1 identified self-awareness as a key tool in learning to decrease his problematic gaming. His process of self-awareness began through counselling. Other participants reflected on self-awareness in a less direct but still important way.

After Participant 1's parents' divorce, he received six sessions of counselling that changed the course of his life. He was thirteen, isolated and overweight, feeling unloved at home and unsafe at school. He was given counselling to help with his parents' split, but it became about more than that. He reflected on why the sessions were so powerful for him:

[1] All it really took was that one person, the counsellor I was seeing, to ask me a couple of times, 'Why do you feel like you want to play video games? Why do you want to play video games?' ... But even saying 'I don't know' started turning the wheels.

Those counselling sessions began a process of self-awareness that helped him to understand his need to play. "I'm playing a lot of video games because I don't want to deal with reality. I don't want to deal with the stressors. I don't know how to." Beginning to understand the roots of his playing allowed him to better understand himself and his own needs, so that he could choose alternative coping strategies in the future.

The counsellor gave him a line of questioning that continued to the present day:

[1] The one that really resonates with me is when I was asked, 'How do you play the game?' Because that's not the one that people normally ask. ... Asking how you play the game opens up a plethora of different questions you can ask that helps dissect the root cause of why you're playing video games in the first place for such long periods. ... Then I start writing down and identifying all the real-life situations that are forcing me into it.

Counselling began with open exploration, mutual questioning and discovery, and led to him creating his own alternatives.

[1] Once we got past the recognition of the reasons why, we started working on healthier coping mechanisms to kind of deal with life stress. ... I was really focused on it, barely played video games, my school grades actually reflected that. ... So that's when my desire to play video games started really dropping.

Participant 1's PG never fully subsided; after hearing his story, I am not surprised. It is so deeply linked with trauma, pain, and isolation. However, his self-awareness led him to better recognize and deal with symptoms early. "I started getting better at identifying or catching myself when I was starting to play games in an unhealthy manner." Self-awareness led him to developing useful tools to combat his PG and the knowledge of when to use them.

Participant 2 also believed it important to question why she was playing. These questions helped her determine if it was healthy or unhealthy for her when she resumed gaming. They are the same questions she poses to young gamers who question whether they are addicted: "Do you feel that you need to be in-game? You have to be in-game even when you don't want to be? Do you still have pleasure to be in-game? Or is this just a commitment?" She believes it is important not to label a behaviour too quickly and encourages parents and children to talk about motivations for playing games.

Participant 3 developed his self-awareness of his gaming's impact when he stepped back from it, with the help of his wife. Cutting back his gaming allowed him to see the reality and consequences of it in his life.

[3] It took some breaking of myself, and some searching to realize that I'm the reason why I was alone. I'm the reason why I don't have a degree. I'm the reason why I just worked service jobs. I can't blame it on anybody else. And the source of that is my addictions. And one of those major addictions was video gaming online.

In this statement, there is a strong sense of accountability. The realisation that his gaming habits were responsible for so much of the strife he experienced seemed to lead Participant 3 into a new determination to change his life.

Self-awareness of PG led some participants to accountability for their PG habits, and therein the choice of how to manage their feelings, urges, and needs.

Conversations with Young Gamers

Participants spoke about how they believed counsellors and other professionals can help young people struggling with problematic gaming. Firstly, some problematic gamers might be in denial or not aware of the unhealthiness of their gaming habits. In her work, Participant 2 meets a lot of young people who play a lot. They often come to her asking for advice on whether or not they have a problem, especially if their playing causes friction within their family.

[2] And so I try to put them on the path that they can talk with themselves, and figure out if they are very addicted. I explain to them, the addiction is not, it's not a timeframe, it's more about your behaviour.

This thoughtful approach reflects Participant 1's focus on self-awareness. His counsellor did not initially know about his gaming and only became aware as they talked about how he spent his days. From her he learned that he plays games differently to how the games are meant to be played.

[1] When people are on the outside saying, like, 'Hey, you have a problem,' it kind of reinforces your bias, like, 'I don't have a problem, I'm doing just fine.' When really you don't notice it. So it's not until that seed has been planted within yourself, where you are asking yourself questions like, 'Is this a problem? Well, yes it is. Why is it a problem? What can I do better?'

Instead of addressing it directly, he recommends a gentler, more roundabout approach to help someone develop self-awareness. Counsellors may have better success with kids when they go in sideways to the issue:

[1] Don't focus on it, because I feel like that will cause the child or the person to kind of close off immediately. You feel like you're being attacked and you go defensive....

To gently kind of bring it to the spotlight and get the child or the teenager, whomever to become self-aware without making it the focal point.

He believes that young people may have emotional baggage around their playing. "Especially because leading up to the counselling session, it's probably been addressed by people in their lives, and probably not in a constructive manner." Considering how participants' PG seemed to often stem from interpersonal challenges in their life, counsellors may want to focus on that first. Conversations about their other struggles may lead to what their gaming means to them.

Participant 4 also thought it was important to look at contextual factors in a young person's life. "Don't just go, 'Oh, you're addicted because X, Y, and Z.' Look into their life and see, you know, maybe they have a shitty home life. Maybe they just socially don't fit in." This approach may help with those who feel defensive about their playing, such as teenagers who have been referred to counselling services by their parents.

Participant 2 would recommend using an empirically-validated measurement to determine PG. "Starting with an interview, and for maybe just to check for two weeks, for example, what the pattern of playing. If it's very too much, or if the child has played during his offtime, which is totally fine." Participants' unique styles and reasons for their gaming illustrate the challenging task of categorising PG, as discussed in the literature review. However, using standardised measurements may help clarify healthy and unhealthy gaming for individuals. Considering participants' stories, that clarity may be better found in an honest discussion of Participant 2's and Participant 1's question, "Why am I playing?"

Benefits of Video Games

All participants spoke in one way or another about the benefits of playing video games. Many learned useful skills that they could later apply in the real world. Both women participants spoke about the meaningful relationships they developed through MMORPGs, and Participant 3 attested to building an important friendship at the beginning of his gaming. While participants'

in-game accomplishments did not translate into the real world, some of their skills and relationships did.

Participant 2 met her husband on World of Warcraft:

[2] "He was a tank, I was the healer. He was doing not the thing, so I was shouting at him, letting him know that if we were dying it was his fault. He was saying same to me. 'If we die, it's your fault.' So yeah, that was interesting. And then, as I said, it's a social thing. So outside the raid, we used to talk all together, and then I start to know him better. And, yeah, it was like evidence for us. We were going to be together.

And that story starts nine years ago, now we are married."

Participant 2 speaks about the social element that, for her, was why she was drawn into MMORPGs in the first place. Her social ties in-game encompassed more than the game; they connected on various levels and talked about all sorts of things. "We don't talk always about just World of Warcraft, we talk about everything, like politicians, what is going on on the earth or in the countries."

Participant 5, too, found a community online that meant a lot to her. It seemed to alleviate some of the loneliness that may have led her into solo gaming. "Jump in the game, and we see what everyone else is doing." She spoke excitedly about the times when her original group can still get together and play. "It's just a small community. So when everybody's desire and schedules and everything come together, then you have this big burst for like, one-to-six months, then it goes away for a year or two."

Participant 3 believed that gaming in the same physical space can be a big factor differentiating healthy and problematic gaming. "I think there can be healthy gaming, especially when you get a couple of kids in the same room, playing a game. And they're having fun."

While Participant 1 shied away from social games, he still attributes video games to helping him with some social skills. "The video games also helped me develop a sense of emotional intelligence.... I learned to understand certain body language, despite not really

learning it socially." As with exploring her social identity through an avatar, Participant 5 feels that role-playing games can help develop social understanding. "It also then helps you with the real world too, because you're learning how your actions and your words can influence other people and other things, too." Therefore, while problematic gaming could isolate them and hinder their real-world social development, video games also provided an opportunity for them to build some social skills as well.

Some participants benefited educationally from certain video games. Participant 5 translated some of the work she had done for role-playing games, as a lorekeeper and an artist, into her university courses. "I was actually able to use all that lore in Comp 283 this term, and I got 100% on it." Participant 3 learned through educational and historical-based games. "I've learned all of the world's geography from games like that. … I remember one of the first Nintendo games that I just loved. It was called Genghis Khan, the Rise of Genghis Khan." However, he casts doubt on the educational value of fantasy role-playing games. "I don't know that RPGs and MMORPGs are the best conduits for expanding somebody's ability to think…. There are games that actually can teach you things a little bit more directly."

Conversely, Participant 1 named a number of improved skills he attributes to fantasy video games such as RPGs. These attributes included reading, concentration, critical thinking, and understanding of technology.

[1] Because thanks to video games, you know, finding workarounds and stuff like that, it's given me a lot of valuable insight into technology. ... So I would say thanks to video games, it's made me a little tech savvy. ... A lot of the games that I played and stuff, there's a lot of like puzzle aspects to it, a lot of problem solving. So I do find that video games help foster critical thinking, because there were games where there'd be a plot twist, and sometimes you could identify it. ... It [also] really improved my reading. ... A lot of the games, especially like the Final Fantasy series, there's no voices, it's all just dialogue. So I had to read a lot. But I liked the story. ... It actually helped improve my

writing, because I was looking at sentence structures, punctuation. ... As we as focus. I find I have a very good amount of concentration when it's not put towards video games. For example, schooling, I can sit down with a textbook and read for four or five hours, not realising the time. ... I guess that's in tandem with working memory. Because a lot of games, you got to think about stuff, keep it on your mind short-term, and then kind of dole it out.

It's possible video games enhanced his concentration or that is a personality trait he already had, similar to Participant 5's hyper-focus and Participant 4's self-defined obsessive personality.

While they certainly would have gained more from other social and educational pursuits, participants expressed gratitude for the silver lining to some of their gaming.

Gender and Toxicity in Gaming Spaces

While several participants highlighted the positive community elements of gaming, they also spoke about how gaming spheres can become toxic. For instance, Participant 4 has seen more experienced players be rude and unforgiving to those who don't know the rules. "Because I've been away for so long people are very disrespectful if you don't understand how every system works."

As a female gamer in male-dominated gaming spheres, Participant 2 faced discrimination and abuse. She tried Call of Duty and found it full of sexist language, such as: "'Can you blow me?' or 'Yeah I want to make love with you.' ... [It was] nonstop harassment, harassment, harassment. It's either sexual or aggressive." However, she found other groups that were less sexist and more open to gamer diversity. Yet she finds few other female gamers out there in World of Warcraft. "We had our own guild, with my husband, where I was the leader of the guild and he was the leader of the roster. And we tried to recruit females. It was very hard. Like, in total, we had two others." She seemed saddened and confused at the relative lack of other women playing something she really enjoyed. However, she is proud to be a female gamer,

and a competitive one. Especially when others comment on it, she remarks, "I like to say, 'Oh, you know I am on the leaderboard, right?"

Perhaps the lack of female gamers is due to stereotypes that extend beyond gaming circles. Participant 2 considered people's reactions outside of gaming communities:

[2] Usually when I meet someone outside, I don't even talk about [gaming].

Because I know people have prejudices about people who play video games. ... A lot of people said to me, usually, when a woman play[s] video games it is either because she's ugly or because she's not good at it.

Participant 2 laughed after saying this, but it shows the depth of prejudice that female gamers face. She was determined to make WoW a more gender-diverse space, where women could find and build safe communities.

Chapter V: Discussion

In this study, I answered the research question: How do those with lived experience of problematic gaming interpret their relationship with their chosen avatar(s)? Throughout the analysis, I developed three superordinate themes: Avatars as doorways into a safer world, Social identity needs driving avatar immersion, and Returning to the real world. These three themes all connect to the literature on problematic gaming and add texture and depth to topics such as negative escapism and avatar identification. In this chapter, I compare and contrast my findings with the wider literature, suggest how this study can be useful to practitioners in the field, and comment on validity and limitations.

Throughout the analysis phase of my research, I made various choices on how to organize the data into themes. Other researchers would likely have made different choices along the way, which is part of the interpretative nature of IPA (Smith et al., 2022). My analysis is inseparable from my own perspective, which I explore in the validity section below. Ultimately, I structured the themes to first provide context (theme 1), then delve into what participants' relationships with their avatars meant to them (theme 2), and finally to answer the research sub-questions and expand on issues that participants considered important to their gaming (theme 3). I hope that this structure allows ease of understanding for readers while highlighting key findings from the interviews.

The key findings describe what avatars meant to participants. When I asked participants about their avatars, they didn't speak that much about the characters' names, personalities, attributes, clothes, or any other distinguishing features. They could have; for instance, I am confident that Participants 3 would have given me the full backstories on some of his mostplayed merchant rogues or Participant 5 on her avatar's quest to discover dragons. However, that did not seem to be what drove their sharing. I tried to follow where participants chose to go, the topics they felt were most significant (Smith et al., 2022). Rather than focusing on the avatar's characteristics, participants instead spoke about who the avatars and games allowed

them to be. It is a subtle but important difference. Using an avatar in an RPG didn't mean that they could become a completely different person, but that they could become a different version of themselves, for a particular reason.

I believe that the most important finding in this study was that participants' real lives and problematic gaming was interwoven and inseparable. The one reflected the other. PG did not happen in isolation, it emerged from real-world social and emotional factors. This finding supports the 2021 study in which Stevens and colleagues found that many gamers believed that problematic gaming sprang out of an individual's real-world struggles. Hagström and Kaldo (2014) defined negative escapism as the urge to distract from negative life experiences, in contrast to escapism for simple enjoyment. Participants' stories strongly mirrored that hypothesis. Participant 2 described it well when she stated, "It was a kind of place that I was able to hide." Participants 1-4 all described specific and significant adverse real-world experiences that precluded their PG. Participant 5 did not share about her real-world situations when her PG began, though she too admitted: "I was definitely missing a lot in my life and that's what drew me in deeper." The problematic nature of each participants' gaming seemed to have a direct relationship with their life circumstances at the time.

The type of game mattered, both in terms of genre and offline versus online playing. Participant 3 could play non-MMO games without any addictive pull but could not play MMOs in a healthy way. For Participant 2, the most important draw was the social factor of MMOs. Participant 1 never liked MMO games but would play offline games intensely. Participants 4 and 5 preferred fantasy games over other genres. Participant 1's enjoyment of military-style games increased after being in the military. Participants' problematic gaming seemed tied to particular genres and types of game. To a significant extent, this preference was personal choice; however, dark patterns within the game design may have preyed upon particular individuals' needs (Zagal et al., 2013). Participants talked about all the three types of dark pattern identified by Zagal, Björk and Lewis: temporal (mindless grinding); monetary (seeing others throw away thousands

of dollars); and especially social capital-based, in which they deeply invested their time for a sense of status (2013). The games themselves, and the companies behind them, are unlikely to be wholly innocent. Overall, participants did not play any or all games addictively; their problematic playing was not random.

Throughout the data, there were some examples of how participants' choice of game and avatar directly related to their real-world selves. The clearest instance was found in Participant 1's reflections. He chose games and avatars where he could be a more confident, capable version of himself. As a child, he consistently chose underdog characters who, like himself, faced a harsh and unfriendly world; unlike himself, they were able to do something about it. Indeed, his gaming decreased when he learned to change his life circumstances as an adolescent and young adult and increased during periods of stress and grief. This illustrates the link between real-world situations and PG.

Participants' descriptions of their avatars support van Looy and colleagues' theory of avatar identification (2012). Participant 1's relationship with his avatars seems to tap into both similarity identification and wishful identification, as he sought characters similar but more able than himself. They displayed characteristics that both reminded him of himself and tapped into who he deeply desired to be. Participant 4's choice of "hard-hitting", close-up fighting avatars fit his "need to jump around. I'm very fidgety as is, as a person." This may reflect van Looy et al.'s (2012) theory of similarity identification and possibly embodied presence, as would Participant 5's description of her avatars being "the fantasy version of me." Participant 2 seemed the least attached to her avatars, caring for them as a way to express herself socially and to effectively enact a leadership role within the group. Her avatar's role seemed an extension of her real-world drives for socialisation, competition and leadership. Her experiences may fit the similarity and wishful identification categories as well. It is important to note that not all participants experienced all types of identification significantly, but tended towards certain ones.

The findings also support a number of other studies. They strongly support Barbera and Haselager's (2020) conclusions that avatars can bridge gamers' real world and idealised selves. Other studies linked low self-esteem with increased avatar identification and PG (Green et al., 2021; von der Heiden, 2019). A 2023 pilot study of Italian gamers found a strong link between low self-concept clarity (SCC) and higher avatar identification and GD (Servidio et al.). In his theory on self-discrepancy, Higgins (1987) postulated that individuals are motivated to bridge the gap between their actual and ideal selves. Those with a large discrepancy between their actual and ideal selves may experience dejection-related emotions (Higgins, 1987). The attainment of an ideal self can show up through avatar identification as an IT identity (Carter & Grover, 2015; van Looy et al., 2012). In this study, participants' relationships with their avatars seemed to mirror the ideal way they would like to feel within a community setting. Therefore, their avatar identification and IT identity seemed inherently social.

Participants described adverse experiences in early life that made the world feel unsafe and/or reduced their perceived efficacy in moving towards their ideal social selves. They felt they could not achieve their ideal selves in the real world. Instead, specific video games and avatars provided an alternative pathway for participants to achieve their ideal selves. For instance, Participant 3 chased status within online gaming worlds: "That social capital that you get when you do something in these MMOs is so valuable." Participant 2 was driven by competition to be on national leaderboards and a leader within her guild. Participant 5 was able to explore her personality, sexuality, and friendships within a safe environment. In contrast to his chaotic home and school life, Participant 1 perceived a sense of safety in non-player character communities: "There's no prejudice, there's no nothing, there's no discrimination, you are wholeheartedly accepted, so long as you're holding the controller pushing this main character around." Each participant had significant and specific real-world motivations driving their problematic gaming.

The finding that most surprised me was the strong social element of these motivations. Without my prompting in the interviews, Participants 1, 2, 3, and 5 all spoke at length and in earnest about how important it had been to them to find a community within the game and take on a meaningful role within it. For instance, Participant 3 spent untold hours of mindless work to achieve high levels and feel a sense of status, as perceived by others he did not even know. This experience fits exactly with Durand Jacobs' seminal 1986 on behavioural addictions: "the individual can escape from painful reality and experience wish-fulfilling fantasies of being an important personage, highly successful and admired" (p. 17). For four of the participants, a virtual community's positive perception temporarily alleviated real-world stress.

This finding may relate to Sioni et al.'s (2017) study, which found that social anxiety could be a driving factor for problematic gamers to attach to an avatar identity. Perhaps for another researcher this finding would not be such a surprise. I related most to Participant 1's story of finding solace and acceptance within the pretend communities of solo games. I recreated the sense of being part of a team and competing through the game *FIFA*. All participants bar Participant 4 described community as a driving factor for their gaming, and how that in-game avatar community felt safer than the real world for them at the time.

Implications for Practice

This study contributes to the counselling literature on several levels. It explores the role of avatar identification in PG, sheds light on problematic gaming on a personal level, and offers tools for individuals and counsellors to break the destructive cycle of PG. As a trainee counsellor, this study showed me how complex the landscape of gaming is for those who might have a problem. Both individuals and professionals can use this study to better understand the roots of problematic gaming and how to address the unique underlying issues driving it.

Counsellors and other professionals can use the knowledge that problematic gamers' avatar choices may reflect unmet needs in real life. For instance, Participant 1's reflections demonstrate his desire for social acceptance, safety, and autonomy. His problematic gaming

naturally decreased when he found a role within the football team: "I was getting gratification from my peers in a social group for once."

By understanding gamers' choices within the game, counsellors can better support clients to meet their needs in the real world. As Participant 4 put it:

[4] So I started to see, you know, how I was in-game starting to leak out into how I was in real life. So, that was a bit of a change. And that's kind of when my gaming slowed down pretty significantly.

By understanding their avatars, counsellors can help clients bridge the gap between their ideal and their real selves.

For participants in this study, the most important needs centred around acceptance and connections within a community. This reflects some of the literature on reducing PG, such as improving school connectedness (Wei et al., 2019) and real-world social networks (Marinaci et al., 2021; Sioni et al., 2017). As an example, I believe that increased school connectedness and secure peer relationships may have supported Participant 4 as an adolescent after his trauma, and led to significantly reduced escapism into gaming. Therefore, counsellors may focus on helping clients identify their fears around experiences and relationships and how they can build authentic connections in the real world.

Additionally, participants noted that engaging in real-world activities was a good way to break away from gaming. Participants could begin to re-root their self-esteem in real-world situations and relationships. As Participant 2 put it, "Today, if I am successful, it's because of multiple things. And not because of video games." It seems important to understand clients' unique needs and their gaming habits may illuminate what they are looking for. For instance, Participant 2 seemed to seek out highly interactive social experiences, competition, and leadership roles. Understanding who the client becomes in the game and the discrepancies between their avatar (ideal self) and their real self can guide practice.

Self-awareness around gaming habits can help individuals and counsellors best understand the process of avatar identification in PG. When he was thirteen, Participant 1 had a therapist who helped him develop awareness of how he gamed: that it was different from other people's gaming habits and why he played the way he played. He reflected that, "Once we got past the recognition of the reasons why [I gamed], we started working on healthier coping mechanisms to kind of deal with life stress. ... That's when my desire to play video games started really dropping." Therefore, self-awareness about motivations for gaming can lead to healthier alternatives.

As a young gamer, I did not understand why I played more obsessively than many of my friends. It was only with time and self-reflection that I began to weave the threads together; counsellors can help children and adults begin this process and then deepen it. Li et al. (2017) demonstrated that mindfulness techniques may help reduce IGD symptoms through building self-awareness and self-regulation. Some participants also described a shift when they came to terms with the real-world consequences that PG was having on their lives. Counsellors may wish to explore and highlight clients' values and aspirations, and how gaming impacts those.

Participants highlighted the need to prioritize relationships that were ultimately more important to them than their gaming. Participant 3 did not want to lose another romantic relationship. For Participants 1 and 2, having a child made their life priorities much clearer, helping them to moderate their gaming. In addition, real-world activities that connected participants with community, nature, and their physical bodies helped alleviate their symptoms. Findings supported Barbera and Haselager's (2020) suggestion that developing a healthier physical self-concept can reduce gaming, such as through exercise. Counsellors can support clients to develop healthier real-world relationships, such as suggested by Koc et al. (2020), who suggested that more family activities may help at-risk youth.

Participant 5's reflections that her problematic gaming was highly linked with her ADHD symptoms and hyperfocus has recent support in the literature. A 2023 meta-analysis by Koncz

and colleagues demonstrated a significant association between GD and ADHD. Therefore, counsellors may want to test those struggling with PG for ADHD as well, and look for mutual treatment solutions. Similarly, counsellors may benefit from understanding potential risks of PG in those with ADHD.

Finally, participants provided guidance on how to counsel those with PG, especially adolescents. Counsellors may want to approach the issue from another direction if the client has already had a lot of outside pressure to change from those around them. It is important to consider the complex issues involved with PG, including past experiences of safety in the world, social elements within different games, and the benefits that video games can provide as well.

Responsibility and support for PG should not reside solely at the individual level. As video games continue to evolve, new laws for the gaming industry should attempt to safeguard gamers from the extreme harms of PG. For instance, with the increasing use of gambling-style loot boxes in games, the financial harms associated with PG are likely much greater than they were in past decades. Participants 1 and 4 told anecdotal stories of others they'd seen lose excessive money, time, and energy to predatory games. Participant 4 described: "So you end up spending seven, eight hours just farming material to make the things that you need for the raid. So it became a job, essentially." Regulations should monitor and protect gamers, especially those under 18, from the potential harms of game design dark patterns, as the gaming industry cannot be trusted to forsake profits to protect people (Goodstein, 2021). While it is important to support people individually, social reforms play a vital role as well.

Overall, counsellors and other professionals can use self-awareness to help clients understand their motivations to game and encourage other activities to help them rebuild their self-esteem and reconnect with the real world in a meaningful way. As real-world struggles can significantly influence PG, counsellors may want to prepare clients to face these struggles as they re-emerge in the real world. Helping clients connect with people and activities that meet the underlying needs expressed in gaming may be a positive way forward.

Limitations and Validity

This study contains a number of limitations, based on the methodology, my researcher stance, and sampling. Here I outline these limitations along with an assessment of the study's validity as a qualitative IPA study.

IPA studies are not meant to generalize results (Smith et al., 2022). Instead, the meaning and usefulness of an IPA study draws from its roots in phenomenology, idiography, and hermeneutics (Smith et al., 2022). Overall, IPA researchers demonstrate the interpreted meaning behind a group of individuals' similar experiences of a phenomenon (Smith et al., 2022). Therefore, the findings presented do not and should not make broad generalisations about problematic gaming. Instead, they offer unique insight into five individual's experiences in the hope that these stories and inferences may inform counselling practice. The lack of generalisability is a notable limitation of the methodology (Smith et al., 2022).

Sampling for this study created natural limitations, both expected and unexpected. To attract participants, I posted in several forums related to gaming and problematic gaming. I vetted enquiries by their ability to meet the inclusion criteria of the study. I ended up with five participants all taken from the Athabasca University general forum. This created a homogenous group in a way I did not anticipate; while their ages ranged from late twenties to fifty, all were students at an online university and several were interested in counselling and psychology. Their interest and situation may have created a sampling bias. Potential participants not as interested in these fields or who did not feel comfortable, able, or interested in sharing their lived experiences for whatever reason may have presented different perspectives within the wider potential population of those with lived experience of PG.

As noted in the data, all participants still played video games in some way at the time of interviewing; therefore, I have no data from previous problematic gamers who choose to no longer game. Additionally, all participants were fluent in English, with Participant 2 noting that

English was her second language. These limitations should be considered; they make the data gathered more homogenous in ways I had not anticipated in the original proposal.

In their IPA textbook, Smith et al. (2022) recommend using Levitt and colleagues' 2018 article on standards to assess validity in qualitative studies. It represents the American Psychological Association Publications and Communications Board Working Group's assessment of standards of quality and acceptance within psychology research. To achieve methodological integrity, Levitt et al. (2018) require papers to demonstrate adequacy of the data collected, management of researcher perspective, findings grounded in evidence, insightful and meaningful contributions to the field, contextual information, coherence, and consistency of analysis. Jonathan Smith published his own evaluation of IPA studies' validity in a 2011 study (2011a) and subsequent reply to comments (2011b). He outlined four necessary criteria for an acceptable IPA study (grounding in IPA theory, transparency, coherence of analysis, and adequate sampling across participant data), along with seven criteria that go above acceptability to make a good IPA study (clear focus, strong data, rigour, depth of theme, interpretative quality, a balance of convergence and divergence, and care in writing) (Smith, 2011a). Below, I summarily assess the validity of my study in consideration of the three sets of criteria, noting limitations.

I used a semi-structured interview guide, which meant that interviews covered similar topics between participants while also following the tangents and experiences they considered significant. One limitation of the data, once I had collected and begun to analyse it, was that I could have asked more detailed questions about avatars' characteristics. Participants tended to speak more about themselves in the context of the games, which formed the foundation of the findings. Therefore, certain avatar characteristics could have illuminated the player-avatar relationships in other ways. However, I found substantial evidence for participants' choice of game and avatar in the context of their real lives.

One of the primary advantages and disadvantages to my researcher perspective was my own experience of problematic gaming. Through self-reflection, creative writing, and personal counselling, I had drawn my own conclusions about my experiences. My lived experience both differed and had similarities to each participant. Throughout the interviews, I was transparent about my experiences and my reasons for creating the study. This seemed to create a greater depth of mutual understanding and connection between myself and participants, and likely put them more at ease in describing their experiences without fear of judgement or misunderstanding.

With an approach of cultural responsivity (Collins, 2018), I attempted to understand participants' experience through their own lens. However, my own perspective on problematic gaming, deeply personal and important to my own identity, needs to be strongly considered when viewing the findings. Some results surprised me, others I expected or had generalized from my own experience. I have attempted to be transparent about my interpretations throughout the study, so that other researchers can evaluate and assess the validity of my conclusions.

I followed Smith and colleagues' (2022) guidelines for analysing the data. I transcribed and annotated each interview before creating personal experiential themes (PETs) for each. From these PETs, I then created group experiential themes (GETs) that through reorganisation and reflection evolved into the superordinate themes presented. I relistened to and reread the original interviews at various points throughout the analysis, as part of the reiterative process of IPA to seek deeper meanings (Smith et al., 2022). My results section includes frequent quotations from the interview data to backup conclusions (Smith et al., 2022). According to Levitt et al. (2018), qualitative researchers may arrive at different conclusions from the same data set, yet the transparency of the study should make the process of these findings clearly understandable to others. Smith (2011a) defines rigour in IPA studies as the representation of sampling from the corpus of interviews. For a study with five participants, at least three should

be sufficiently represented within each theme (Smith, 2011a). All participant data is included to some degree within my superordinate themes, while subthemes present a range from significant idiographic data from one participant to comparisons between up to all five.

I provided some contextual information about various participants as necessarily limited by anonymity. I did not gather demographic information from participants; however, contextual information emerged during interviews when relevant to the topic, such as age, relationship history, upbringing, and so forth. I have attempted to include this context in the results.

Only the reader may judge the insightfulness and meaningfulness of my findings, along with their coherence. I have contextualized my findings within the general literature in this section and sought supervisory guidance along the way to check for coherence. I initially organized my themes in a narrative structure to follow the progression of participant's problematic gaming experiences; however, this did not seem to best answer the research question. I hope that the current organisation provides sufficient structure to make the context and findings clear.

Regarding consistency, I was the sole researcher throughout the analysis. Seasoned IPA researchers warn that the method requires time and energy to learn (Callary et al., 2015; Miller et al., 2018; Smith & Nizza, 2021). Due to the time commitment inherent in its data analysis, students sometimes rush IPA studies to meet university deadlines (Miller et al.). I completed my recruitment, data collection, analysis and write up over the course of 18 months, alongside school and work commitments. Apart from supervision feedback, I worked on my own. Callary and colleagues (2015) noted an advantage they had in working in a team, where they could bounce ideas and interpretations off of one another. Defending their process to one another strengthened their overall understanding (Callary et al., 2015). Alone, I had to work especially hard to create a layered, complex, and transparent study. I attempted to give equal weight to each participants' experiences and highlight both convergence and divergence within the data (Smith et al., 2022).

I have attempted to adhere to IPA principles throughout the process of sampling, interviewing, analysing, and writing up the data to create an acceptable study (Smith, 2011a). My academic supervisors have provided feedback at various points to deepen and challenge my conclusions. I hope that this research qualifies as a valid and acceptable IPA study, with the potential of influencing the psychology field through meaningful insights into the lived experiences of problematic gamers' relationships with their avatars.

Future Directions

This Interpretative Phenomenological Analysis study explored the role that avatars can play in problematic gaming. The study was limited in a number of ways and reflects five individuals' experiences of PG, focusing on depth rather than breadth. Wider qualitative, quantitative, and mixed methods studies with other populations can create generalizable results and guides for counselling practice.

There are several populations I believe worth further consideration. My participants were all engaged in online university courses; studying other populations, such as non-students, university-educated and non-university educated adults, and young people would yield more comprehensive results. All the participants were adults in their late twenties and up. It is important to speak with young people about the current gaming landscape, which continues to evolve and expand. There are likely significant similarities and differences between PG triggers in modern games such as *Fortnite* compared to the games that my participants grew up playing. Additionally, it is important to research the experiences of those working with problematic gamers. Studying the experiences of counsellors experienced in working with clients with PG may identify effective counselling tools and potential ethical tensions.

The lived world of any phenomenon, such as problematic gaming, is not confined to those who struggle with it but also their friends, family, and community (Larkin et al., 2019). Multiperspectival IPA extends the reach of IPA by incorporating two or more perspectives, thereby deepening understanding of the relations involved (Larkin et al., 2019). Heselton and

colleagues (2021) demonstrated how to incorporate community-based participation into an IPA study, receiving input into research questions and directions, interview approaches, and dissemination audiences. They actively sought to produce positive change in the autism community through their study, using education and providing free counselling. Alternative IPA designs, such as multiperspectival, community participation, or the integration of visual media, can add layers of complexity to a study, increasing its application (Smith & Nizza, 2021). However, they are not recommended for novice researchers, as they require a more complex design (Larkin et al.; Smith & Nizza, 2021). Using multiperspectival IPA or a similar methodology may enhance the scope of PG research beyond the individual.

Considering my finding that a need for safe and attainable social connection drove participants' PG, future researchers may want to emulate such work as Wei et al. (2019), Apisitwasana et al. (2018), and Li et al., (2017) by testing models of social connectedness in moderating PG. Awareness of PG risks and vulnerabilities can better inform parents, educators, and young people. It may help identify ways to break the cycle of distress and escape before it becomes overwhelming, as suggested by participants in Stevens and colleagues' 2020 study.

This study is limited to avatar-based, role-playing games. Studies looking at differences in problematic gaming between avatar-based and non-avatar-based games may illuminate important nuances in why people play. Researchers may also want to compare PG to similar technology addictions, such as problematic use of pornography and social media.

Finally, this study demonstrates a link between real-world experiences, avatar identification, and problematic gaming. Further research could examine in more detail how problematic gamers use their avatars in online social settings. As companies such as META build online avatar-based work environments and people increasingly work from home post-pandemic, it is important for us to understand the potential risks of problematic avatar identification more widely. Risk factors such as low self-esteem and self-concept, social anxiety, and adverse childhood experiences may make individuals vulnerable when engaged in these

environments. Further research should identify the risks and opportunities of avatar identification (van Looy et al., 2012) and IT identity (Carter & Grover, 2015) in the context of problematic gaming and how they impact gaming, work, and other social settings.

Chapter VI: Conclusion

This study represents years of work preparing, interviewing, analysing, and writing. Much more than that, it condenses down decades of the lived experiences of five individuals: their struggles and triumphs. Many of the findings back up previous research in the field of problematic gaming and I believe that it also provides some new insights. I came up with the topic for this dissertation over three years ago, as I began the literature review in my second year of graduate school. However, the original idea sprouted long before, during my own lonely hours of playing video games and in the years of trying to untangle just what had happened, why, and what I had done to myself. It was a moving experience speaking with five others, who shared stories similar and distinct from my own. As I reflect now on participants' stories, they stand out to me as ones of deep resilience and courage. They were drawn into this false safety, the alluring promise of an avatar, this more secure self through which they could stand tall, explore, connect. I know the challenges of moving on from that false promise, and how the accumulation of time and energy builds up into a cloud of regret and shame that can make it all the more difficult to find a new path.

I chose to conduct this research because I want to pass forward the hard-won insight of those who have experienced PG to those who may need guidance now and in the future. I stand by my own teacher's motto: Wisdom comes from the wound. Perhaps more than ever in our world, we need resilient and compassionate mentors. Technology is evolving at breathtaking speed and represents only one facet of our global permacrisis state of affairs. The more we can understand vulnerabilities to problematic and harmful technology use, the more we can protect ourselves, our loved ones, our communities, and especially young people. I will take the experiences and stories from this study forward with me into my own work as a counsellor, and I hope that these findings can seep out into the world in some small way to give hope to those who need it.

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Appendix A: Informed Consent

Avatar Identification in Problematic Gaming: An Interpretative Phenomenological Analysis

PARTICIPANT CONSENT FORM

Principal Researcher: Supervisor: (if applicable)

Connell Green Dr. Murray Anderson, PhD, RCC

cgreen8@athabasca.edu murrayanderson@athabascau.ca

Dr. Jennifer Stephens, PhD, RN

jstephens@athabascau.ca

You are invited to participate in a research study about the relationships between RPG/MMORPG videogame players and their virtual avatars during periods of problematic gaming (i.e. videogame addiction / gaming disorder). I am conducting this study as a requirement to complete my Master of Counselling degree.

As a participant, you are asked to take part in an audio-video recorded 1:1 interview via Zoom about your experiences of problematic gaming and your possible connections to your chosen game avatars. Participation will take approximately 45-90 minutes of your time for the interview, plus initial contact, consent form completion, technological setup for you, and later the opportunity to read through the interview transcript.

This research interview has the possibility of causing you some psychological distress through describing difficult experiences. The benefits may include the opportunity to share your story in a way that may support others going through similar struggles. This study is in no way meant as treatment or professional support for problematic gaming or mental health issues. If you experience distress because of the interview, I will have contact information for psychological support resources available for you, such as helplines and counselling services, based on your general local area.

Involvement in this study is entirely voluntary and you may refuse to answer any questions or to share information that you are not comfortable sharing. You can withdraw at any time leading up to and during the interview. You may also withdraw from the study at any time during the data collection period by contacting the researcher and you have a one month right to withdraw following the interview. If you withdraw, all information regarding your participation will be permanently deleted.

The interview transcript will be provided to you and you will have a two-week period to redact any comments you do not wish to appear in the public domain through publication.

All information you provide during the study will be anonymized during transcription. Recorded audiovideo interviews will be stored on an encrypted Google Workspace account and a password-protected external storage device that will be locked in a safe in the primary investigator's home in the United Kingdom when not in use by the primary investigator. Following transcription, the recordings will be permanently destroyed. A physical copy of anonymized transcripts will be kept in the safe until one month after publication. A physical copy of the master list of pseudonyms and contact information will be kept in the safe until one month after sending you the final thesis document and publication information. Transcripts will

be kept for 7 years post-publication in the Google Workspace. A digital master list of pseudonyms and contact information will be kept with the transcripts, then deleted after the 7 year period. This will be used to inform you of publications and identify you if you initiate follow-up contact during that period.

Results of this study may be disseminated in academic conferences and publications. A copy of the finished thesis article will be emailed to you. Anonymized transcripts will be uploaded with restricted access to Zenodo (see Invitation to Participate document for further information). The existence of the research will be listed in an abstract posted online at the Athabasca University Library's Digital Thesis and Study Room; and the final research paper will be publicly available.

If you have any questions about this study or require further information, please contact Connell Green or Murray Anderson using the contact information above.

This project has been reviewed by the Athabasca University Research Ethics Board. Should you have any comments or concerns about your treatment as a participant, the research, or ethical review processes, please contact the Research Ethics Officer by e-mail at rebsec@athabascau.ca or by telephone at 780.213.2033.

Thank you for your assistance in this project.

CONSENT:

I have read the Letter of Information regarding this research study, and all of my questions have been answered to my satisfaction. I will keep a copy of this letter for my records.

My signature below confirms that:

- I understand the expectations and requirements of my participation in the research;
- I understand the provisions around confidentiality and anonymity;
- I understand that my participation is voluntary, and that I am free to withdraw within the time periods stated in this document with no negative consequences;
- I am aware that I may contact the researcher, research supervisor, or the Research
 Ethics Officer if I have any questions, concerns or complaints about the research
 procedures or ethical approval processes.
- I understand that the data I provide will be anonymized and that data set (or sets) from
 this project will be deposited in Zenodo, the open research data repository, under
 restricted access by the primary investigator.

Name:	
Date:	
Signature:	
For example:	
By initialing th	e statement(s) below,
	I am granting permission for the researcher to use an audio-video recorder
	through Zoom software

	I acknowledge that the researcher may use specific quotations of mine, without
	identifying me
	I am granting permission for the researcher to attribute a pseudonym to any quotes used
	I would like to receive a copy of the results of this research study by email
e-mail addres	s:
_	
•	ing to have the researcher contact you at a later time by e-mail or telephone for a
	e so below. You will not be contacted more than six months after your interview.
	Yes, I would be willing to be contacted.

Appendix B: Interview Guide

Principle Researcher: Connell Green

Supervisors: Dr. Murray Anderson, Dr. Jennifer Stephens

Smith, Flowers, and Larkin recommend six to ten questions for a 45-90 minute IPA interview (2022). I have followed their guide to create this list. The sub-questions represent optional prompts if needed.

- 1. Can you tell me about the games you've spent the most time on?
 - a. What have been some of your favourites?
 - b. Which ones have been the most difficult to manage your playing time on?
- 2. What was your life like at the time you were gaming too much?
 - a. How old were you?
 - b. How long did it go on for?
 - c. Where were you living?
 - d. Who were you close with?
 - e. Were you working or in school?
- 3. Can you tell me about your gaming habits then?
 - a. What did a typical day look like?
 - b. Did you play alone or with others?
 - c. How did it impact your life outside of gaming?
- 4. What are some of the avatars you've played that have meant the most to you?
 - a. Or ones that you have spent the most time on?

- b. What are their names?
- c. What did they look like?
- d. Do they have a backstory? Special abilities?
- e. How do you feel about them now?
- 5. Why do you think you chose those games and those characters?
 - a. Could it have been any game and character or did they represent something special to you from the outset?
 - b. Do you think the characters were similar to you or different?
- 6. What helped you move forward in your life?
 - a. How do you manage gaming now? Do you still play?
 - b. What was going on in your life when you began playing less?
 - c. Were there any important people who helped you or changed your perspective in some way?
- 7. If you could have a conversation now with a therapist who's working with someone struggling with problematic gaming, what would you say?
 - a. What advice would you give?
 - b. What advice would you give to the person struggling?
- 8. Is there anything else you would like to share that you think might be useful for me in my study?
 - a. Is there anything you'd like to add to what you've said so far?
 - b. Is there anything from your sharing that you'd like me not to use?

Is there anything you would like to withdraw from what you said?

Appendix C: Ethics Approval



CERTIFICATION OF ETHICAL APPROVAL

The Athabasca University Research Ethics Board (REB) has reviewed and approved the research project noted below. The REB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2) and Athabasca University Policy and Procedures.

Ethics File No.: 24740

Principal Investigator:

Mr. Connell Green, Graduate Student Faculty of Health Disciplines\Master of Counselling

Supervisor:

Dr. Jennifer Stephens (Co-Supervisor)
Dr. Murray Anderson (Co-Supervisor)

Project Title:

Avatar Identification in Problematic Gaming: An Interpretative Phenomenological Analysis

Effective Date: May 18, 2022 Expiry Date: May 17, 2023

Restrictions:

Any modification or amendment to the approved research must be submitted to the AUREB for approval.

Ethical approval is valid for a period of one year. An annual request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

A Project Completion (Final) Report must be submitted when the research is complete (i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable)) or the research is terminated.

Approved by: Date: May 18, 2022

Carolyn Greene, Chair Athabasca University Research Ethics Board

Athabasca University Research Ethics Board
University Research Services, Research Centre

1 University Drive, Athabasca AB Canada T9S 3A3
E-mail rebsec@athabascau.ca
Telephone: 780.213.2033



CERTIFICATION OF ETHICAL APPROVAL - RENEWAL

The Athabasca University Research Ethics Board (REB) has reviewed and approved the research project noted below. The REB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2) and Athabasca University Policy and Procedures.

Ethics File No.: 24740

Principal Investigator:

Mr. Connell Green, Graduate Student
Faculty of Health Disciplines\Master of Counselling

Supervisor/Project Team:

Dr. Jennifer Stephens (Co-Supervisor)
Dr. Murray Anderson (Co-Supervisor)

Project Title:

Avatar Identification in Problematic Gaming: An Interpretative Phenomenological Analysis

Effective Date: May 17, 2023 Expiry Date: May 17, 2024

Restrictions:

Any modification/amendment to the approved research must be submitted to the AUREB for approval prior to proceeding.

Any adverse event or incidental findings must be reported to the AUREB as soon as possible, for review.

Ethical approval is valid for a period of one year. An annual request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

An Ethics Final Report must be submitted when the research is complete (i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable)) or the research is terminated.

Approved by: Date: April 25, 2023

Paul Jerry, Chair Athabasca University Research Ethics Board

Athabasca University Research Ethics Board
University Research Services Office

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