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# Homo Gamicus

A qualitative study of gamer's self-expression through avatars and in-game purchases

by

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## **Abstract**

**Title:** Homo Gamicus

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**Keywords:** Gaming, In-Game Purchases, Player Type, Self-expression, Avatars

**Thesis Purpose:** This study aimed to understand gamers on a deeper level and investigate how certain in-game purchases and avatars can assist gamers with their self-expression.

**Methodology:** The study used a qualitative research method with an inductive approach.

**Theoretical Perspective:** Two theories were used to structure and make sense of our findings. We used theoretical guidelines from the theory of the extended self and Bartle's taxonomy of player types to answer our research question.

**Empirical Data:** The data collection consisted of 12 semi-structured interviews of individuals who consider themselves gamers. There were no restrictions regarding gender or nationality, but the respondents were also chosen based on their age.

**Conclusions:** The findings revealed that by customizing their avatar through free content and in-game purchases, players could express traits of their personality in a way they cannot in other circumstances. This study revealed interesting differences between all player types that affect how they identify with their avatar and how they use in-game purchases. Developers can also use these conclusions to create appealing in-game content.

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# I. Introduction

## 1.1 Background

In Greek mythology, Proteus was the god of transformation; he could change into any shape and form. Over time, the understanding and use of his name have inspired a phenomenon known in the gaming industry as the "Proteus Effect," coined by Yee & Bailenson (2007). The Proteus Effect explains how the in-game avatars' characteristics can shift and alter the gamers' behavior in the virtual world (Yee & Bailenson, 2007). The authors explained that gamers have certain behavioral expectations if they possess a particular avatar. For example, they found that users with more attractive avatars tend to be friendlier, and users with female avatars act as caregivers and healers (Yee & Bailenson, 2007). At times these virtual behaviors can be carried over to the physical world. As a result, gamers may change their physical behaviors and actions (Yee, Bailenson & Ducheneaut, 2009).

In the physical world, it is customary to express oneself through physical accessories such as clothes and makeup or more permanent changes such as plastic surgery and fillers (Yee & Bailenson, 2007). However, these physical options to express oneself are often expensive and time-consuming. In the virtual world, the customization of avatars is presented as a viable and uncomplicated option for self-expression. This ease of customization is one of the main reasons for encouraging people to appreciate and spend time gaming (Yee & Bailenson, 2007). As highlighted by Woodbury (2021, p.1), gamers "come to the digital worlds for what [they] can do, but they stay for who [they] can be."

Avatars are visual representations of the players and are central to immersing oneself in the gaming experience (Pringle, 2015). They are constantly visible on-screen and are controlled by the player throughout the game. The avatars can appear differently depending on the game perspective (Sabbagh, 2015). For example, third-person perspective games, such as World of Warcraft, are separate entity characters controlled by the player (Appendix A). Alternatively, the avatar can be a customizable gun in first-person perspective games, such as Call of Duty (Appendix B). In addition to the different perspectives, games offer distinct options for avatar customization. For instance, in Genshin Impact, players can choose between 48 different



characters but cannot make any edits to their physical appearance (Appendix C). Then, in *Grand Theft Auto 5*, users can create an avatar and edit features ranging from facial structure to apparel (Appendix D).

Even though there are some premade avatars offered within certain games, players often enjoy spending time customizing and creating an avatar (Pringle, 2015). Some researchers credit this to digital environments that allow individuals to construct and express their identities (Turkle, 1997). Certain users create an idealized version of themselves, whereas others prefer to experiment with different genders or ethnicities (Yee, Bailenson & Ducheneaut, 2009). Avatars allow users to create a character with similar, idealized, or entirely distinct characteristics from themselves, granting players complete freedom in their self-expression.

Games traditionally offer free customization options to edit and personalize avatars. However, gamers can make in-game purchases with real money or in-game currency acquired through gameplay if they want more options. These in-game purchases are solely used within the virtual world for gaming or avatar enhancement purposes. In-game purchases can be categorized into functional or non-functional items (Marder et al., 2018). Gamers have different purchase intentions for non-functional and functional items due to their different nature and varying game purposes.

Functional items are purchased mainly for convenience and competitive advantages, such as to advance faster within the game (Marder et al., 2018). Non-functional items are purely aesthetic and do not impact players' in-game performance. They often include cosmetic items and skins that are used to alter or upgrade the avatar's appearance (Marder et al., 2018). The need for self-expression often influences the motivation to purchase; but will vary depending on the functionality of the in-game content (Chen & Chen, 2020). For example, non-functional purchases are influenced by the need for social value and help players enhance their image in the eyes of others" (Chen & Chen, 2020, p.5). Similarly, functional items help gamers showcase their dedication to the game and fulfill their specific goal.

In 2020, global players were believed to have spent around \$54 billion on in-game purchases, which is expected to reach \$74.4 billion by the end of 2025 (Statista, 2021b). These increasing numbers reflect a growing trend of the considerable role in-game purchases play in the gaming industry. Game developers are offering elaborate, immersive virtual worlds with high levels of

customization and numerous opportunities to interact with others (Marder et al., 2018). As a result, many gamers will turn to in-game purchases to feel a sense of status and get social value within the gaming community. This "social value emerges from consumption creating a sense of belonging or shared social identity within a group" (Marder et al., 2018, p.74). As such, social values reinforce the bonds of communities in virtual worlds. These communities are becoming more diverse as more females and adults are starting to play video games (Williams, Yee & Caplan 2008). These new virtual settings create new consumption patterns and new forms of self-expression.

## 1.2 Problematization

Many researchers have investigated how the avatar is an extension of the self and can be essential in self-expression. For instance, Wang, Zhao & Bamossy (2009) found that Chinese gamers use avatars to extend a sense of self by customizing the avatar with characteristics they would like to possess in real life. However, the existing literature often combined all gamers into one homogenous group, limiting themselves to a single game genre (Belk, 2013; Pringle, 2015). In reality, there can be significant differences in why gamers choose to play particular games and how they choose to play them (Embaugh, 2016). Bartle (2014) is amongst the few to have separated players into four distinct categories based on how they interact with fellow players and within the game. His player types consist of achievers, socializers, explorers, and killers. Bartle (2014) provided elaborate definitions and practical examples of each player type, but he does not relate these to avatars or self-expression. Despite the differences between players, as Bartle (2014) pointed out, the existing literature continues to aggregate players as a single, congruent group. There is a need to merge these two streams of research and explore the connection between the different player types and self-expression in gaming.

However, the research that confirms that avatars can be an asset in self-expression fails to mention in-game purchases. These are traditionally bought to enhance or change the avatar's appearance and are therefore intrinsically linked to avatars (Pringle, 2015). Similarly, Cleghorn and Griffiths (2015) explained that the longer a user spends playing with his avatar, the more likely they will be to make in-game purchases for the avatar in question. Cleghorn and Griffiths (2015) are amongst the few researchers to cite self-expression as a motivation to make in-game

purchases. Nonetheless, the existing literature on the incentives behind in-game purchases is not fully understood and emphasizes the need for further research (Wang, Sun, & Luo, 2022).

The existing literature is shown in the form of blue puzzle pieces in Figure 1 to showcase the current research gap. As Wang, Shao & Bamossy (2009) illustrated, some research has already linked avatars to self-expression. This is illustrated by the two connected puzzle pieces on the bottom left of Figure 1. Cleghorn and Griffiths (2015) also established a link between avatars and in-game purchases, making the link between both concepts more evident. Their research is depicted as the two puzzle pieces on the top left of Figure 1. Bartle’s (2014) taxonomy of player types has defined and illustrated specific differences between video game players. Based on this, the lack of differentiation between gamers is a significant flaw in current research on avatars. As shown by the gray puzzle piece, we attempted to fill this research gap and build upon all the mentioned research streams.

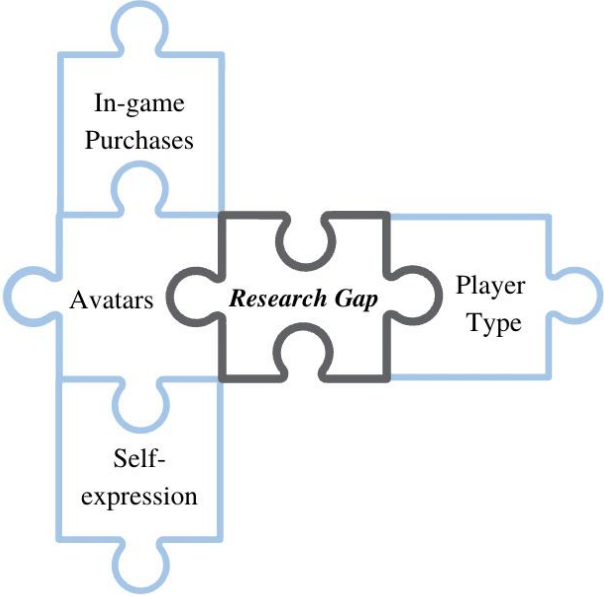


Figure 1: Illustration of the research gap

From a societal perspective, gaming is constantly evolving through technological advances. With the rise of new technologies such as Virtual Reality or Artificial Intelligence, gaming is becoming a leading platform for innovation (Marr, 2022). Therefore, it is essential to continuously revise and develop the research on gaming and its impact on society. Amongst the new gaming trends, we find that in-game purchases are becoming increasingly popular.

Recently, in-game consumer spending has surpassed traditional video game revenue and comprises the largest share of the video gaming market (Aroged, 2022).

Despite the rise of these in-game purchases, there is still some disagreement around the monetization of video games (Anderton, 2018). Indeed, the ease of making in-game purchases have caused some gamers to be vocal about their experiences with impulsive or accidental purchases of in-game content (Barth, 2018). Game developers rely on in-game purchases to develop new in-game content to keep players satisfied and engaged (Barth, 2018). However, many gamers fear that they will be manipulated into spending money on games to advance, referred to as pay-to-win games. Instead, these users prefer to make in-game purchases if they are cosmetics and skins (BBC, 2021). Therefore, to guide marketers and developers in creating successful virtual items, it is vital to understand the intrinsic motivations of players behind in-game purchases.

### 1.3 Research question

In an attempt to build on the existing literature, we attempted to understand the value of avatar customization for players and how it enables self-expression. We provided new insights on the subject by further elaborating on how different players utilize in-game purchases to express themselves.

Our research question will be the following:

*How do gamers use avatars and in-game purchases for self-expression?*

### 1.4 Aims and Intended Contributions

The limited research on gaming could be due to the negative associations with games. Many articles correlated adverse psychological effects to gaming. Indeed, effects like "increased aggression, negative academic and occupational consequences" seem to be recurrent in the traditional gaming literature (Sublette & Mullan, 2012, p.1). However, some researchers stated

that gaming could fuel imagination and emotional regulation (Bowen, 2014). Despite the conflicting research and views on this topic, the detrimental consequences of gaming are more recognized and popular within literature (Konstam, 2014). Indeed, the stereotype of the traditional gamer remains as a socially awkward, lazy, and introverted male (Williams, Yee & Caplan 2008). As such, more research is needed to destigmatize gamers and argue the positive aspects of gaming. To offer a new angle on the existing literature, this study has elaborated on the benefits of self-expression in gaming.

Throughout this study, we aimed to contribute to Belk's (2013) theory on the extended self. Similarly, Bartle's (2014) model of the different player types has been applied to the study's findings to understand the players' taxonomy better and present a clearer picture of their self-expression. By expanding on these theories, we aimed to provide new findings in the literature and uncover new suggestions for further research. We created a goal to understand better how gamers' in-game purchases and avatars reflect their designated player type. We also believed there is a connection between each player type and the individual's form of self-expression. Essentially, by understanding how avatars and in-game purchases help gamers in their self-expression, we aimed to generate insights on which types of in-game content different gamers prefer.

Gaming is a lucrative industry expected to be worth \$268 billion by 2025 (WePC, 2022). The worth is constantly increasing and represents a profitable opportunity for marketers. Considering this, we hoped to assist marketers, and game developers create successful content for their customers. In addition, existing research has developed this topic from a psychological perspective and often omits it to give practical guidance to developers (Konstam, 2014; Belk, 1998). Therefore, by adding a marketing perspective to this topic, we distinguished this study from existing literature and provided a new angle.

## 1.5 Research Outline

In order to introduce the context around our research question, we first discussed the literature review. Then, we justified our methodological choice and outlined our research approach. We then presented the empirical findings from our interviews which led into a discussion, which is

an analysis of our findings. Finally, we aimed to find conclusive evidence to answer our research question.

## II. Literature Review

An extensive literature review has been conducted to provide an overview of the existing studies on self-expression in gaming. We attempted to refine our problem and its relevance by highlighting gaps or new research trends. The existing literature has guided us towards delving further into self-expression through gaming. After refining our research, we have thus settled on the most appropriate keywords, namely “self-expression,” “gaming,” “Avatar,” and “in-game purchases.” To uncover relevant literature, we used Google Scholar because of the wide variety of articles available. Google’s sophisticated ranking system ensures that the most popular and relevant articles appear higher up the page (Beel & Gipp, 2009). Therefore, we have reviewed the first four pages of each keyword.

Self-expression was the starting point of this study and was researched first to understand the core concepts and expose existing gaps in the literature. This yielded 386,000 results, of which we included 6 in our literature review. We found that most articles were based on Belk’s 1988 article about the extended self and thus decided to make it the focus of our thesis. Then, to understand the gaming industry and define gamers, we searched “gaming” and obtained 855,000 results. After thoroughly revising the most relevant articles, we decided on five articles to guide our research. We chose the keyword “avatar” to get an overview of the topic. The breadth of the topic is reflected in the nearly 400,000 articles on Google Scholar after searching for this keyword. To refine the results, we combined “avatar” and “self-expression” in our search and obtained 58,100 results, out of which we used 6. Following this, we focused our research on “in-game purchases” and obtained 17,600 results.

## 2.1 The Path to Self-Expression

### 2.1.1 Conveying Self-Expression through Possessions

In the article “Possessions and the Extended Self,” Belk (1988) presented the extended self-concept, which discusses how self-expression can be conveyed through possessions. He revealed that possessions become a part of our identity through self-extension, which “occurs through control and mastery of an object, through the creation of an object, through knowledge of an object, and contamination via proximity and habituation to an object” (Belk, 1988, p. 160). Possessions help us present ourselves positively and display elements of our personality. As such, by extending one’s identity to possessions, individuals seek to express themselves. Possessions are accumulated over the years and provide individuals with a sense of their past. They provide individuals with a timeline and can be seen as an essential measurement of achievement and personal success. As a result, people feel that they need to purchase valuable possessions to improve their self-worth and identity (Belk, 1988).

Belk (1988) also cited the research of Csikszentmihalyi (1982), who argued that “the consumer invests ‘psychic energy’ such as effort, time, and attention into an object. This energy and its products are then regarded as a part of self because they have grown or emerged from the self” (Csikszentmihalyi, 1982, p. 157). They believed that by putting symbolic meanings into their belongings, these belongings helped individuals distinguish themselves.

### 2.1.2 Conveying Self-Expression through Gaming

Over time, many researchers have remodeled and reused the concept of the extended self. In recent years, this research topic has grown significantly, causing Belk (2013) to further elaborate on his concept of the extended self in digital settings. With the rise of a new digital era, marked by new technologies and constant interactions with others, people have expressed a need to extend their identities to the internet (Belk, 2013). Belk (2013) has noticed a similarity between individuals’ purchasing behaviors towards physical and digital possessions. He believed his original theory was relevant and could be extended to non-physical possessions,

such as avatars. He also mentioned skins, weapons, etc., which can be considered in-game purchases (Marder et al., 2018).

In his extension of the extended self, Belk (2013) explained that online activity tends to reveal our personality traits. Despite the lack of physical presence and interaction, individuals create a version of themselves online, be it representative or ideal, to express themselves to other users. Belk (2013) recognized five significant additions to the extended self in digital settings. Driven by digitalization, the five changes include dematerialization, re-embodiment, sharing, co-construction of the self, and distributed memory. Dematerialization refers to the rise of immaterial goods. Re-embodiment “challenges the central role of the physical body” (Belk, 2013, p. 493). Sharing explains the beneficial role of the internet as a space for exchanging information. Similarly, co-construction refers to the social nature of the virtual world. Finally, distributed memory raises how the virtual world has made it simpler for individuals to construct their lives narrative online (Belk, 2013).

For this study, the most relevant change brought up by Belk (2013) was re-embodiment. The author explained how digitalization had changed the role of the physical body. Indeed, the 21st century offers infinite options to create online versions of ourselves, which allow us to be “disembodied and re-embodied as avatars” (Belk, 2013, p. 481). The opportunities to customize this digital representation of the self and to let go of any physical disabilities make re-embodiment even more appealing for gamers. Indeed, many games provide a wide array of options to customize the name, the appearance, and the life of these avatars, giving the players endless opportunities to express themselves.

Belk (2013) also explained that due to the fear of being judged by society, individuals might find it challenging to express themselves in face-to-face conversations. This fear will increase if the individual feels that their true self falls outside of the bounds of what is socially acceptable (Hu et al., 2017). According to Wearing et al. (2022), gaming offers an entertaining consumer experience and the opportunity to resist established social norms. In light of this, some scholars have found that the online world might create a more open and accessible space for self-expression (Bargh, McKenna & Grainne, 2022; Hu et al., 2017). Research suggests that anonymity is central to expressing oneself in a virtual environment as it allows individuals to experiment with their identity and explore various ways of self-expression online (Wallace, 2008).



Gaming is an online platform highly recognized for its anonymity and socializing perks (Webb, 2001). The online environment in gaming “cultivates high levels of immersion that can lead to temporal changes in perception and cognition” (Dindar & Ortiz de Gortari, 2017, p. 1). The technologies and realism of video games blur the line between the player’s virtual gaming world and reality. As a result, it positions the avatar played by the user as a part of the self, influencing the player in both physical and virtual settings (Ratan & Dawson, 2016). Essentially, the relationship between player and avatar creates various opportunities for self-expression through customization options and in-game purchases.

## 2.2 Avatars and In-Game Purchases as a form of Self-Expression

There are many options available for self-expression within gaming. The most popular way to customize one's gaming experience is through avatars (Pringle, 2015). According to Wolfendale (2006), players use their avatars to communicate with others and establish a strong sense of presence. The author argued that avatars are the re-embodiment of players' self-perception, even when the avatar does not physically resemble the player. Wang, Zhao & Bamossy (2009) also explained that players could choose their identity by changing their avatars' skin color, hairstyle, and accessories through in-game purchases. These customization options give players a powerful attachment to their in-game characters (Wang, Shao & Bamossy, 2009). Two types of avatar creation can explain the intense emotional attachment. Certain people create a self-reflective avatar with similar characteristics, while others create an idealized persona with characteristics they lack in real life. Both avatars reveal "considerable information about self-presentation and social behavior" (Pringle, 2015, p. 4).

According to Belk (2013), the re-embodiment allows players to become attached to their avatar and project parts of their identity onto this virtual character. Gamers can express parts of their identity by choosing their avatar's physical appearance. Through "selecting, modifying, and accessorizing" the digital representation, gamers can construct an idealized version of themselves or use gaming as a platform to try out various selves (Belk, 2013, p. 482).

Blinka (2008) explained that avatars are central to the gaming experience. In-game purchases like outfits, skins, and cosmetics allow users to customize their avatars and make them their own, thus reflecting their identity. Indeed, according to Guo & Barnes (2009), the anonymity of the online world creates lower levels of trust. As such, gamers use in-game purchases to edit their avatars to look friendlier and more trustworthy to other players. In the same way, individuals purchase clothes and accessories in real life to reflect their identity; gamers rely "on language, behavior, appearance, and property [...] to convey and portray their preferred image to others" (Chen & Chen, 2020, p.2).

The importance of impressing others and displaying the best version of oneself seems meaningful for gamers. Indeed, Chen & Chen (2020) explained that through gaming, individuals could transcend physical boundaries and have the opportunity to develop their interpersonal skills and enhance their self-worth. Likewise, Blinka (2008) has noticed how people with lower self-esteem feel a higher need to demonstrate their performance in the game and therefore identify more strongly with their avatar. Through avatars and in-game purchases, gamers "compare themselves with others to judge their abilities and display the image they want others to see during their online activities" (Chen & Chen, 2020, p.1). Therefore, it is possible to make certain inferences about their personality or social tendencies after analyzing individuals' gaming behaviors and the type of purchases they make.

## 2.3 Theoretical Framework

### 2.3.1 The Extended Self in Gaming

Belk's (1988) concept of the extended self focuses on how an individual's identity is built upon their physical possessions. In his recent expansion on the extended self in the digital era, Belk (2013) expressed a necessity to update the literature on the extended self. Indeed, new tools for self-expression regularly arise with the continual development of technologies. As a result, there are limits when applying Belk's (2013) research in the present digital media era.

It is important to expand upon Belk's (2013) article as he leaves several open-ended questions. He has explained that "older consumers...were less likely than younger consumers to see digital possessions as part of their extended self" (Belk, 2013, p. 481). However, his findings were

fragmented, and he has solicited future research to understand age's role in online self-expression better. As such, by deliberately choosing an age span of younger individuals, we hoped to investigate whether growing up surrounded by technology makes it more likely to extend the self to an avatar.

More specifically, we used Belk's (2013) findings on re-embodiment to get a deeper understanding of why and how the participants of this study use avatars for self-expression. We also developed a conceptual framework of Belk's framework to better relate it to our findings.

By drawing a parallel between Belk's (2013) theory and our findings, we hoped to answer our research question. Belk (1988) explained that when children are born, they cannot distinguish themselves from the environment. By controlling objects, they slowly begin expressing themselves as individuals with specific preferences and interests. Similarly, adolescents go through an identity crisis and increasingly seek identity by obtaining and accumulating specific objects. They move from defining themselves by traits such as age, location, and name and start identifying with skills and traits related to their possessions. For instance, over time, they start to relate with sports or musical instruments over which they have control. Players exert similar control over their avatars, making these a part of themselves (Belk, 2013). As such, virtual and physical possessions seem to hold a central role in an individual's self-expression. Therefore, we believed that by applying the concept of re-embodiment and the extended self to our study, we would be able to understand how avatars and in-game purchases help gamers with their self-expression.

### 2.3.2 Bartle's Taxonomy of Player Types

The research on gaming literature has revealed Bartle's (2014) taxonomy on player types. The article, "Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDS," identified four types of gamers, as illustrated in Figure 2.

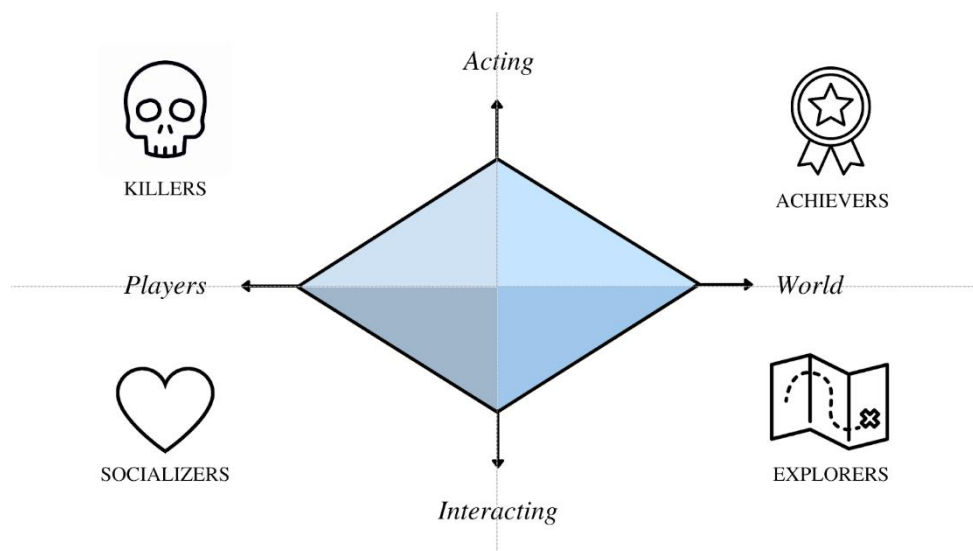


Figure 2: Bartle's Player Type Taxonomy (adapted from Bartle 2014)

The x-axis illustrates a player's focus on the world inside the game (right) or other players within the game (left). The y-axis distinguishes interacting with the game itself (bottom) versus acting individually in the game (top).

According to this division, four types of players are defined. Achievers place a high value on advancing in the game's levels and gathering as many points as possible. Explorers are interested in investigating the hidden, internal features of the game and how they work. Socializers game solely for the interaction and the opportunity to sympathize with other players. Finally, killers enjoy being more potent than other players and imposing their status or skills on the rest of the game's community.

This model helped categorize our interviewees into different player types, as each of them has distinctive characteristics and roles in gaming. The model was also used to see if certain types of gamers associate and identify more with their avatar and are more inclined to make in-game purchases. We hoped to present more nuanced research on gaming and self-expression by categorizing the different player types.

# III. Methodology

## 3.1 Research Approach

This research aims to understand how avatars and in-game purchases help different gamers in their self-expression. The personal nature of this research topic, guided by the individual experiences of each player type, forces us to consider a variety of answers. As such, it is beneficial to use an open-ended exploratory approach to uncover these different viewpoints. Indeed, Jackson, Drummon & Camara (2007) explain that humans have "richly textured experiences," which makes it essential for respondents to have the opportunity to develop and elaborate on their experiences (Jackson, Drummon, & Camara, 2007, p. 21). Therefore, through a qualitative study, our respondents can clearly describe their views and help us obtain novel findings.

Many methodologies exist, but depending on the research question, some may be more relevant than others. Methodologies such as surveys do not allow the researcher to go in-depth into each player's experiences. According to Driscoll (2011), surveys are better used to reveal general patterns of behaviors or to find "small amounts of information from a wider selection of people" (p.163). Furthermore, with online surveys, it is possible for respondents to misunderstand the question or to give a brief and non-detailed answer. Therefore, surveys are not adapted when research aims to uncover detailed, individual points of view (Driscoll, 2011).

Similarly, focus groups are typically used when the respondents can build upon each other's experiences (Easterby-Smith, Thrope & Jackson, 2015). However, given the particularities and significant differences in each player's experiences, a focus group may not have been efficient. Similarly, society can judge gamers, and individuals may not be willing to share their experiences with others (Shi, Potenza, & Turner, 2019). Instead, through the conversational subtleties of semi-structured interviews, the interviewee can be more honest and open, allowing the researcher to better understand each player's individual experiences.

The number of resources spent on in-game purchases, such as time and money, is undoubtedly quantifiable, but we will not be focusing on this. Instead, by looking into behavioral data and trying to interpret the gaming experience, we solicit findings that do not involve statistical

interpretations or any other quantifiable aspect. In recent years, certain studies have elaborated on self-expression in gaming with a quantitative approach (Pringle, 2015; Wang, Sun & Luo, 2022). With our research, we would like to present a qualitative angle to the existing literature and reveal more profound insights into gamers' identity and the need for self-expression through avatars and in-game purchases.

Previously, we have conducted a pilot study about the purchase of virtual goods in gaming and their effect on consumer identity. This small-scale study revealed that gamers have different needs and incentives to make in-game purchases, driving us to focus on the different player types in this research study. We also concluded that gamers express their individuality by creating and customizing avatars through in-game purchases. This conclusion from the pilot study shifted our current study towards self-expression. The pilot study's findings helped narrow down our research question and understand what makes gaming so exciting and valuable for self-expression.

## 3.2 Philosophical Aspect

This paper takes a relativist ontological perspective and a constructionist epistemological approach. The literature and the phenomenon studied for this research centers around relativism. Relativism is an ontological perspective claiming that there is no single reality and the multiple realities are made out of subjective experiences (Levers, 2013). Indeed, relativists state that our individual experiences are constantly influenced by external forces, such as cultures, beliefs, and desires (Stanford Encyclopedia of Philosophy, 2020). Easterby-Smith, Thrope & Jackson (2015) explain that social realities are experienced differently by people depending on their background, physical appearance, and many other factors.

In gaming, these different realities are apparent through the high variety of game genres and the diverse gaming communities (Sevin & DeCamp, 2020). If someone chooses to partake in first-person shooter games, such as Counterstrike, their experience might be completely different from someone who plays a third-person fantasy adventure game, such as World of Warcraft. Moreover, having a particular avatar might change a player's gaming experience (Yee & Bailenson, 2007). As the Proteus effect explains, specific avatar traits, such as height and

gender, might shape individuals' in-game behavior. The external circumstances around each player, such as occupation, age, gender, and skills, can also influence the time and budget they are willing to spend on gaming (Yee & Bailenson, 2007). As such, every gaming experience is somewhat unique and subjective. In this study, gamers' experiences will not be judged or given arbitrary value and simply try to be understood.

When adopting a relativist position, a constructionist epistemological perspective is usually combined (Easterby-Smith, Thrope & Jackson, 2015). Constructionism entails that reality is "socially constructed and given meaning by people in their daily interactions" (Easterby-Smith, Thrope & Jackson, 2015, p.52). Constructionism is relevant to studying video games as gaming conveys a participatory culture (Crawford & Muriel, 2018). In other words, gamers construct a specific reality by choosing a specific community and sharing it with other players. Additionally, the aim of this paper corresponds to constructionism as we are trying to find and understand the different perspectives of gamers (Easterby-Smith, Thrope & Jackson, 2015).

After acknowledging the different realities, the researcher must uncover them through qualitative methodology (Easterby-Smith, Thrope & Jackson, 2015). As researchers, we acknowledge the differences in each player's experience and try to understand them. The interviewees' experiences and interpretations are shaped by societal influences (Easterby-Smith, Thrope & Jackson, 2015). As such, we are not attempting to find a single truth and are simply trying to understand the players' perspectives. To uncover the different players' experiences, we will be conducting qualitative research. More specifically, we will be interviewing gamers of different ages, genders, and nationalities. Through interviews, individuals can express their personal opinions and allow us to gather a variety of perspectives.

### 3.3 Research Ethics and Quality Criteria

There are five criteria when evaluating the quality of qualitative research: credibility, transferability, dependability, confirmability, and reflexivity (Rennstam & Wästerfors, 2015). Credibility is critical in research to ensure that the findings are valid and represent a truthful interpretation of the data collection. To achieve this, we had long discussions with the interviewees to understand their points of view and prevent misinformation (Korstjens &

Moser, 2017). During the interviews, we also asked questions like "What do you mean?" to ensure a correct interpretation.

The second criterion is transferability, the degree to which the research can be transferred to other settings with different respondents (Korstjens & Moser, 2017). We conducted the interviews until reaching saturation in the results. Then, by thoroughly detailing our data collection, we ensured that similar conditions could be reproduced.

The third criterion is dependability, the consistency of the participants' evaluations of the research findings. This essentially means that research is reliable, and each research step is documented thoroughly. To ensure this, we kept an audit trail of all of the reports from the findings (Korstjens & Moser, 2017).

The fourth criterion is confirmability which means that another researcher could confirm our findings. By keeping an audit trail of all the data collection methods, we ensured that other researchers could reproduce the same conditions and obtain similar results (Korstjens & Moser, 2017). The last quality criterion is reflexivity; this is the process of evaluating the researcher's various biases, preconceptions, and assumptions. To examine this, we noted all of our perceived biases and how these have possibly affected our research study (Korstjens & Moser, 2017). To be fully transparent in our research, we have disclosed these in the limitations part of our study.

On top of ensuring the quality of our findings, it is essential to protect the research participants and the integrity of the research community (Easterby-Smith, Thorpe & Jackson, 2015). Various measures were taken throughout our research to maintain an ethical position. Firstly, in order to protect the privacy of the research participants and guarantee their anonymity, we have given our interviewees aliases. Then, before each interview, the participants were given consent forms (Appendix E) that informed them of their rights and avoided any deceit about the aims of the research or their role in it.



## 3.4 Data Collection Method: Interviews

### 3.4.1 Methodology

We conducted semi-structured interviews to cover the topics needed and allow the discussion to move in any relevant direction through follow-up questions (Easterby-Smith, Thrope & Jackson, 2015). This structure enabled us to get detailed, in-depth responses necessary to answer our research question. In addition, the semi-structured interviews have created a more relaxed, discussion-like environment (Easterby-Smith, Thrope & Jackson, 2015). The relaxed environment was used as a technique to make the interviewees feel comfortable and free of judgment. The open discussion format of semi-structured interviews helped make interviewees less overwhelmed as they were able to guide the conversation.

Society can judge gaming as a hobby (Shi, Potenza, & Turner, 2019). As such, gamers might experience embarrassment when spending money on games or spending time customizing their avatars. Therefore, we have created a safe and relaxed environment where the interviewees did not feel judged. As such, we were able to obtain more honest and thoughtful answers.

We conducted interviews until reaching saturation, which happened after 12 interviews. Likewise, Guest, Bunce & Johnson's study (2006) titled "How many interviews is enough" has also confirmed that saturation is generally reached after 12 interviews. To ensure we did not lose any detail or information, we have recorded and transcribed each interview. During the interview, each teammate has taken on a different role. To ensure effectiveness, one person conducted the interview; one person asked secondary questions, while the last one took notes. Additionally, our interviews lasted between 30-45 minutes to ensure consistency and fairness.

All the interviews were conducted over Zoom due to the geographical disparity of our interviewees. Research has also shown that holding interviews online can bring about many benefits. Indeed, Oliffe et al. (2021) explain that when people are surrounded by the comfort and familiarity of their own home, they are more willing to talk freely and honestly about personal experiences. In addition, the built-in recording device provided by Zoom made the interviews easier to conduct and transcribe.

To ensure each interviewee was comfortable and aware that their responses would be recorded, we emailed a consent form (Appendix E) to each interviewee, informing them about the subject and main goals of the research study. Each interviewee was required to sign the consent form before the start of the interview, to ensure confidentiality and permission.

### 3.4.2 Sample

The individuals chosen for our interviews were picked based on specific behaviors and characteristics, as we wanted to ensure that each interview would be relevant to our analysis. Amongst our community, we have found and interviewed people who consider themselves gamers regardless of the time spent playing. We have also selected people that tend to spend money on in-game purchases and are willing and comfortable to talk about it. There was no restriction on the nationality or origins of the interviewees, as the gaming community can be considered very international (Statista, 2021a). Regarding age and gender, we restrained our sample to people aged 17 to 27. This age segment is more familiar with emerging technologies and has the potential to provide more relevant information (Vogels, 2019). In Table 1, we included the details of each interviewee, with aliases to ensure their privacy.

*Table 1: Sample Description*

<b>Name:</b>	<b>Age:</b>	<b>Gender:</b>	<b>Occupation:</b>	<b>Average gaming time per week (in hours):</b>	<b>Nationality:</b>
Mike	24	Male	Student	8	Swedish
Alex	26	Male	Student	21-23	Indian
Robbie	25	Male	Student	10-15	Swedish
Charlie	25	Male	Working	21-23	Japanese
George	22	Male	Student	20	French
Liza	27	Female	Student	8-10	Dutch
Kevin	27	Male	Working	10-42	Turkish
Isabel	22	Female	Student	20-23	Dutch
Jacob	17	Male	High School	6-8	Spanish
Peter	24	Male	Student	20-42	Swedish
Sabrina	23	Female	Working	5-8	Lithuanian
Sierra	26	Female	Student	2-4	Dutch

### 3.4.3 Interview Questions

The literature review and theoretical framework helped us uncover critical topics for our interviews, such as the gaming community, avatars, and in-game purchases. From there, we created an interview guide with a list of open-ended questions, which was helpful for our discussion (Appendix F). Indeed, organizing the interviews as mentioned allowed for a more straightforward analysis of the empirical findings.

When formulating our interview questions, we used the laddering technique. We created open-ended questions with secondary questions based on the interviewees' answers. We included words like 'why,' 'how,' 'what,' 'tell me about...' in our questions to get more comprehensive answers and explanations. We decided to use the laddering technique as it helps effectively understand the underlying causes for particular responses or behaviors (Hawley, 2009). In addition, this technique helped limit bias in the study as it avoided including our own beliefs in the questions and ensured more truthful responses (Hawley, 2009).

#### 3.4.4 Interview Analysis

After transcribing the interviews, we sorted our data by dividing it based on the content and recurring themes. After this, we created theoretical codes for the analytical process, where each theme had a distinct color. In addition, each interviewee's response had a unique symbol to distinguish them from one another. (Rennstam & Wästerfors, 2015). Using the coding program Atlas.ti, we created 12 codes, including "My Avatar," "Gender Stereotypes," "Anonymity," "Community," and "Player Type" ... Sorting our material according to codes has helped us obtain a better overview of our findings, and made the analysis process much easier (Rennstam & Wästerfors, 2015).

Then, we reduced the sorted material. In this reducing process, we identified the most valuable data from the interviews and added it to a document. This step helped us analyze the interviews in further detail and create a more manageable set of data (Rennstam & Wästerfors, 2015). The reduction technique used is categorical. As such, the data and findings from the interviews have been reduced into categories (Rennstam & Wästerfors, 2015). There was also a prioritization in place, identifying which categories are more relevant to our research problem and which do not add any new insights for the analysis.

Finally, once the data set was reduced, we used the arguing step to theorize our findings. According to the themes and the categories identified, it was easier to link these findings to our research aims. To analyze the collected data, we have applied concepts and theories from the literature review and theoretical framework; and attempted to further expand upon these findings.

# IV. Empirical Findings

## 4.1 Participants

We have collected data from twelve interviews. As such, we decided to present each participant individually using their alias and pinpoint the most relevant findings from their interviews. The findings are structured according to the interview guide. However, the semi-structured nature of our interviews caused the structure to evolve and vary per interviewee, causing the interviews to differ slightly.

### 4.1.1 Mike

*12 April 2022*

The interview began by asking Mike why he played video games, for which he emphasized two aspects. First, he stated that "it is sort of a way to hang out with your friends," accentuating the robust social features of gaming. He also mentioned that he values the competitiveness of gaming as he explained that seeing his rank improve is pretty exciting. Then, we listed and explained each of Bartle's player types and asked Mike which one he identified most. Unable to choose a single one, he answered that he was an achiever and a bit of a socializer. Given the nature of his player type, it is not surprising that his favorite games are first-person shooter games like Counter-Strike. However, he also enjoys playing World of Warcraft, an online role-playing game where players can build their characters.

Similarly, when Mike was asked what his avatar looked like, he referred to World of Warcraft and explained that he tried "to match their appearances with the character and their background." He was passionate about his avatars and built an elaborate story around each character. However, he also mentioned that when he played the NBA, he tried to make the avatar look like himself to "live in that role." He thought it would be interesting to role-play and pretend he was in the NBA. By doing so, he pointed out a certain resemblance and correlation between his online avatar and his authentic self. When asked if he feels emotionally attached to the characters he has created, Mike denied it and defined it as nostalgia. He stated that he has been playing for 8-10 years since he was a kid.

Over the time Mike has spent playing these games, he has made a few purchases. He prefers in-game purchases that offer benefits and allow him to advance faster in the game. However, when he decides to purchase in-game content to customize his avatar, he said it is due to the repetitive nature of the game, and "if you buy skins, it changes the game a little bit. It does not become a new game, but it is a little bit more interesting". Mike further elaborated on the types of avatars and how the community reacts to these. He explained that when people purchase expensive skins for their avatars, they are expected to be good players. If they are not, the community might react with criticism and hate.

#### 4.1.2 Alex

*14 April 2022*

Alex listed several reasons as to why he games. His favorite game is a first-person shooter game, which allows him to "have fun with friends" and "relax." Like other interviewees, Alex has met many people online with whom he has formed lifetime bonds over similar interests. Then, when asked which of the four-player types he identified most with, Alex was torn between achiever and explorer. His love for "shiny badges" pushes him to reach higher levels, while his desire to explore side quests and roam around the virtual world incites him to identify more with the explorer type.

Alex also elaborated on the toxicity of the gaming community and believes it stems from the platform's anonymity. He explained how "you are concealed by a username, by some kind of a VPN and no one knows where you are playing from". This allows users to take advantage of the ability to hide behind screens.

When discussing his avatars, Alex explained how he first started with a human character that looked like him. After getting more familiar with the game, he started experimenting; as he explained, "it was more of an exploration and digging deeper into the game". As he explores games, he tends to make in-game purchases of skins and cosmetics. These allow him to make the gaming experience more personalized and exciting for him. Alex believed his in-game purchases have more value than physical goods, as they are not perishable and have a longer life. His gaming experience is so powerful that he even mentioned the appeal of owning some

of this in-game content in real life, as he has already attempted to sew a dress he owned in one of the games.

#### 4.1.3 Robbie

*15 April 2022*

Robbie described himself as a somewhat competitive and sporty person. As such, what attracts him to gaming is the ability to challenge himself and channel his competitive side. However, he also defined gaming as a "fun hobby" that helps get his mind off things, like a "break from the world". Robbie believes his player type is a combination between achiever and socializer. Comparable to his real personality, he mostly chases competitiveness. In addition, he enjoys playing with random people, although he rarely stays in touch with them outside of the game. Despite the benefits of gaming, Robbie claimed the community could get very toxic. Like other interviewees mentioned, he believed this is due to anonymity. In games, players "have a toxic attitude when they're not held personally accountable to some extent".

Robbie likes to go for "aesthetically pleasing characters" in the games where creating and customizing an avatar is possible. He also likes to create the best-looking character that would spark a conversation amongst other gamers and make others laugh. However, if given the opportunity, he usually chooses characters for their features and their ability to enhance his game performance. Robbie claimed he does not know when asked whether he feels emotionally attached to his avatars. Instead, Robbie defined this bond as nostalgia because he has used some of these avatars for almost ten years. Although he admitted that losing these characters would cause him some sadness, it would mainly be due to the time invested in creating and customizing them.

According to Robbie, an expensive skin means "they probably dedicate a lot of time to the game, and they should be better players". Similarly, he likes to show off his accomplishments in the form of skins and cosmetics. He prefers obtaining these by unlocking them through quests; instead of purchasing them, which he deems too easy. The only in-game purchases Robbie usually makes are the functional ones that help his avatar advance in the game faster.

#### 4.1.4 Charlie

*14 April 2022*

Charlie puts much value on gaming. He plays daily until physiological needs like sleep become too strong to hold off. Charlie admitted he is addicted to gaming, and obtaining winning streaks is what makes him “feel the dopamine coming out of [his] brain”. Gaming has taken such an essential part of his life that he states, “I adjust my life to games. Sometimes I set up my daily routine so that I can play games whenever I want to”. His love for games has made him purchase gun skins to enhance the gaming experience and make it more interesting.

He also stated that he feels a particular accomplishment when he sees a variety of gun skins in his inventory. Naturally, Charlie felt immediately compelled to the killer type. He explained that he likes to explore and get achievements, but his ultimate goal is always to be the best. He does so by often gaming and purchasing in-game content that helps him advance in the game.

Due to the nature of the games he plays, Charlie does not spend much time customizing his avatar and prefers sticking to the basic features. He believes that people who customize their avatars do it to obtain some recognition. When asked to reflect on this, Charlie claimed that people purchase avatar skins as “they prefer to interact in the gaming society because they feel more important than in real life. They feel like gaming is their main world, where they want to spend their lives”. He explained that these skins have no functional purpose and solely exist to enhance a player’s online appearance. Charlie thinks free customization options are minimal and that the will to differentiate oneself will push players to make in-game purchases.

#### 4.1.5 George

*12 April 2022*

George has been a heavy gamer most of his life; he expressed in his interview that he finds pleasure in video games as it is a distraction from reality. He stated that the social community in video games is a crucial incentive to gaming as he states, "I have created friendships with people that I have never encountered. I'm still in contact with them after 10 years". His friendships with individuals from around the world have allowed him to develop his English skills. When asked what type of player he is, he said he has a killer personality with socializer



tendencies. He especially enjoyed Minecraft because he thought he was pretty good at it compared to his friends.

Overall, George stated that most video games he plays do not have avatars. However, in Minecraft, he has used an anonymous character as "it displayed some terror. [He] used to really like this skin because it was kind of mysterious". In gaming, George desires to differentiate himself from other gamers and will turn to purchase skins in order to do so. However, he did not claim to have any attachment to his skins, although he has used them for many years. George explained that as he has gotten older, he has stopped buying many skins. When he purchases skins, he buys them to scare people or become more assertive in the game. Overall, he would turn to purchases to show other players that he was better and more advanced than them.

A primary reason behind his purchases was for status purposes. He said that "for me, if you have skins in the game, people instantly think you're better because you are ready to put money in the game, which means that you really want to play this game and you look forward to improving yourself". George said that individuals with advanced skins would be associated with strong skills and abilities; thus, others would behave cautiously around them. He added that if players with these exclusive skins did not live up to their perceived ability, they would be judged harshly.

A massive aspect of gaming, George explained, was anonymity. He explained how as people are sitting behind a screen, "it completely changes your behavior if you don't have the person facing you. And you do not know what the person looks like behind a screen". Due to this, George said that he could get quite aggressive when he plays with strangers as he will never meet them in real life.

#### 4.1.6. Liza

*19 April 2022*

Liza stated that she got into gaming as most of her close friends were gamers, and it was a social activity to do together. Once she entered the gaming world, the storytelling aspects of games pulled her in. She said that she liked "games with stories and difficulty levels, so it brought a challenge with engagement". Her favorite game is Horizon Zero Dawn, which has a very detailed story and exciting graphics. She identified herself as both an achiever and an explorer

player type and expressed how she could spend months uncovering the hidden aspects of the game. As a result, she feels that she has an emotional attachment to the story of the game rather than to her avatar.

When designing and customizing her avatar, Liza always tries to make her avatar funny and bizarre. She said she always chooses the ugliest character because she wants to get reactions from others. In addition, Liza rarely makes in-game purchases as she would instead find exclusive skins through exploration. She explained that this way she would also feel more pride, and others would value her more for it. "I feel that if you buy virtual goods, you're probably doing it because you want to look cool in front of others...those people come off as try-hards." When asked about this, she explained that it could be due to cultural reasons as she believes the Dutch can be pretty frugal with money.

The community was an aspect of gaming that Liza emphasized was important to her. Liza expressed throughout her interview how much the gaming community has grown in the past years. "I think people sometimes who do not game underestimate do not how much influence from a business perspective the gaming industry has." She said the gaming community goes beyond just the actual video game and is enormous on platforms like Discord and Reddit. However, even though she said that the gaming community could be beneficial sometimes, it can also be quite toxic, especially for females. She explained how "there is a huge stigma that girls cannot game...it is super annoying because I have to justify everything I do". In order to avoid these stereotypes, she and her female friends tend to choose male avatars. She also loves *Horizon Zero Dawn* because the story's lead character is a female.

#### 4.1.7 Kevin

*15 April 2022*

Like others, Kevin plays video games because of the social benefits. Growing up, he did not receive much attention at home. He explained, "if there is no one who wants to talk to you at home, where do you go next? For me, it was online gaming". One of the aspects of gaming that he enjoys is how there is a community for everyone. A favorite game of his is *Celeste*, a storytelling game about a transgender girl. "There's a lot of people who are also struggling with either mental health or transitions, being transsexual. I like to see those people have a gaming

community because there are a lot of people who feel the same...so they can talk to each other, which is great." He explained how the most significant similarity between gaming communities is the support you get. Especially in the Celeste community, equality seems to be holding a central role, and gender discrimination is frowned upon. Another favorite game of his is Runescape, as he has been playing it for almost 20 years, and it holds much nostalgic value. Kevin's deep-seated knowledge and high familiarity with these games have allowed him to profit from some of the avatars he has created by selling them to other players.

Kevin believed he was an explorer when asked which player type he was. "I can see myself walking around maps for hours just to find the hidden things, easter eggs, bugs and all that." He stated that in his favorite game, Celeste, he would spend seven or more hours trying to find a hidden reward. Typically, he explained that he would not do this but that this game holds emotional value to him and that finding hidden rewards brings him instant happiness. To help him find hidden objects or rewards, he purchases in-game currency. He buys skins sometimes, but this will depend on how much time he spends on the game, "if I'm going to play this game for a long time, I might want my character to look fancy". He expressed in the interview that many people will turn to purchasing expensive skins or cosmetics if they want to gain status in the game and want to feel that they matter.

Kevin has a different approach when customizing his avatar; he tries to make them look evil and dead, just like one of the main characters from his favorite game, Celeste. He said, "that character is my evil alter ego, because I will be toxic sometimes as well". In addition, he mentions that his characters are always female in games.

#### 4.1.8 Isabel

*19 April 2022*

Isabel expressed that her passion for gaming came from the ability to escape reality. "I think it is a nice escape from reality. If I want to wind down, I will play some games." She explained how it is her favorite hobby as she can enter another world and explore another part of herself. Isabel enjoys storytelling games where she can make decisions and guide the story.

Due to the nature of her preferred games, she would identify as an explorer. She explained how she has an adventurous side and enjoys searching for the internal features of a game. Her

favorite game is Genshin Impact, which has a very kind and helpful community. She enjoys this game mainly because there is no gender-based discrimination. As a result of the positive community, she has made many friends worldwide from the game but has not been able to meet them because of geographical constraints.

When asked how her avatar looks, she explained how in Genshin Impact, one could pick a character and customize their outfit. She said she plays with female and male characters with detailed background stories. As she is a caring and nurturing person in real life, Isabel states that "I don't identify with them that much, but I want to. I see them as people I want to take care of because they're both going through a lot in the game, and I feel bad for them".

When approaching a game, she said that she spends much time trying to collect specific outfits or avatars. She believed that customizing her characters "is one of the main objectives why you want to game". As a result of the effort and time she puts into customizing her avatars, Isabel believed that she has an emotional attachment to her avatars and thought that most people in the community do too.

Isabel gets a monthly subscription when making in-game purchases, which gives her a certain amount of in-game currency to buy new outfits and characters. She has this subscription to "show the limited-edition outfits off to other people". Many people purchase these outfits for the sole reason of getting comments from others. Isabel has also noticed that the longer someone plays a particular game, the more emotionally attached they become, and as a result, the more money they would want to spend.

#### 4.1.9 Jacob

*20 April 2022*

Jacob was the youngest participant in this study and only recently began gaming. When asked why he plays video games, Jacob explained that he does it to spend time with his friends and meet new people. Accordingly, he defines himself as a socializer. Jacob said that he has made around 15 to 20 friends solely through gaming. When discussing how it feels to be friends with someone he has not met in person, he mentioned that he does not "have an impulse to know how they are in real life". Jacob explained that when thinking about his gamer friends, his "nickname, avatar and voice, since it's the only thing you have from that person".

Jacob's favorite games include Rocket League and FIFA. He motivated his choice by stating that "[he] likes football and cars, so these games are perfect for [him]. He mentioned that Fortnite has a special place in his heart as it was the first game he ever played. Similarly, his favorite avatar is the first one he is ever played with, a female character from Fortnite. Jacob stated that he even feels a sense of ownership over this character and gets irritated if his friends play with it too often. Jacob felt he spends much time customizing his avatar, making his friend impatient to start the game. Jacob explained that he has an emotional attachment to his avatars, as "they are [his] avatars."

Since he started gaming, Jacob has made a lot of in-game purchases. He explained that he especially enjoys in-game purchases connected to the real world. "For example, Rocket League collaborated with Jurassic World. I like the film, so I bought the car."

#### 4.1.10 Peter

*15 April 2022*

Peter defined himself as a casual gamer. The social nature of gaming is the main reason he enjoys playing video games. His favorite game is League of Legends, which he has been playing since 2013. Peter identified the most with the socializer player type. However, he mentioned that he also has some achiever tendencies. When discussing the gaming community, Peter believed that it is changing for the better. However, he mentioned that players can still be quite toxic to one another due to the lack of face-to-face interactions, "you don't see humans, you just see avatars".

In League of Legends, Peter chooses his avatar based on strength and skills to maximize his team's winnability. Peter stated that he prefers his avatars to look human. He shared that the creators of League of Legends had found that unhuman-looking characters get played less than human-looking ones. Peter believed that this is due to recognition, "you have so many different things going on in games. Having something that looks familiar resonates with more people". Due to his player type, Peter stated that he likes to customize his avatars. He also mentioned that it depends on what game he is playing. Peter discussed how immersive the gaming experience can be and how it impacts his relationship with his avatar. When talking about his avatar, he said, "When I'm in the game, I see it as me, but if I die, I don't get afraid or anything".

Peter has used both in-game currency and real money to make in-game purchases. He buys skins to differentiate his avatar from others. Peter explained that "it's a fun thing because you play the same character for so long and it looks the same. Having a different skin makes it a little bit more fun". He also mentioned that if he were playing alone, he would not be inclined to purchase in-game content or spend time collecting free in-game content. Peter evoked how rare skins might affect other players' perception of themselves, especially if the skin is earned through in-game achievements.

#### 4.1.11 Sabrina

*19 April 2022*

Sabrina has been playing video games for eight years and has streamed her gaming sessions. She enjoys gaming because of the entertaining nature of video games and the opportunity to play with others. Sabrina explained that through gaming, she had accessed a whole new community. When describing the gaming community, Sabrina reasoned that "whoever you are, wherever you are and whatever you play, eventually you're going to find people you like and become friends with".

Sabrina immediately identified with the socializer player type. Consequently, she described Grand Theft Auto 5 as one of her favorite games as it has allowed her to form many close friendships with people from around the world. Interestingly, Sabrina admitted to calling her in-game friends by their username rather than their real names. She stated, "it might look weird from the outside, but for us it's very common. When we play, we don't say our real names".

When asked about her favorite avatar, she described a female character from League of Legends who is "all funky, with long blue hair and two guns. I like her! She is a crazy one". Sabrina stated that she could spend much time customizing her avatars to make them look visually appealing when playing it. When doing so, she claimed she put part of herself into creating the avatar. Sabrina also expressed how the time players put into their in-game characters will depend on what game they play. She argued that in shooter games, gamers put less effort into creating their avatars since "you're going to die in the game and nobody's going to see you".

Whereas "in games where you walk around and interact, somebody is more likely to notice how you look".

Sabrina agreed that players get treated differently based on what their avatars look like. She explained how some of her male friends who choose to use female avatars get "picked on, because people think they're girls". Initially, Sabrina said she doesn't feel emotionally attached to her avatars. However, she expressed that she would be distraught if she lost them. Nonetheless, she did not consider this to be emotional attachment, "it's more about the time investment. People learn to draw; you learn to play games and if you lose whatever you've had there it sucks".

Sabrina admitted that she could be slightly more aggressive when gaming than in real life. She explained that it is likely due to the anonymous nature of video games, "you're probably playing with that person for the first and last time. [...] You can actually make really good friends, or you can hate people to death and rage at them the whole time".

Sabrina mentioned that she often makes in-game purchases to buy character skins. The main reason for making these purchases is because they are visually appealing. Sabrina explained that she rarely makes impulsive purchases regarding in-game content, "usually I find something I like and if I still like it after a long time, I buy it". She believed individuals would buy rare, expensive skins to receive status and extra attention. Sabrina also mentioned that some people need approval from others, and having better skin gives them more social capital. By commenting on other people's skins, she provided approval or criticism to fellow players.

#### 4.1.12 Sierra

*13 April 2022*

Sierra started her interview by sharing a very emotional part of her life. She explained that as a teenager, she was bullied and lived a life that hindered her from having friends. As a result, she said, "I played every day, I pretty much lived online and that was my entire world". Playing online was easier for her as no one knew her in real life. For her, anonymity allowed her to make friends much more accessible than in real life. Indeed, she could be "more cheery, happy, and confident" online, whereas she was going through insecurities in real life.

Initially, the community and social opportunities online attracted her to gaming. To this day, she has met a few of her online friends in real life and has become a part of a supportive community that she still stays in touch with. She mentioned that she does not consider herself competitive; thus, she is not interested in shooter games. Instead, she believed she was more of a creative person and preferred storytelling games. Accordingly, she defined herself as a socializer. While gaming with strangers, she feels a "responsibility to be [her] best character" to live up to her teammates' expectations.

Sierra always tries to make her avatar look like herself, going as far as naming her character with her real name. However, she has met many people that do not look like their avatar in real life. Despite the physical difference, she believed that the player's "personality still shines through somehow". In addition to the time spent customizing her avatar, Sierra enjoys buying skins. She stated, "I want to look as cool as possible because I'm also playing that game as an extension of myself". Therefore, she has bought clothing that she would like to own in real life but feels that others would judge her. The time and resources put into customizing her avatar create emotional attachment.

Sierra had an interesting perspective on female avatars and how they are treated in games as female gamers. Due to the male-dominated gaming field, players try to impress females by giving them "free stuff and help". She also mentioned that males, who do not experience this special treatment in real life, use female avatars to get benefits in the game.



# V. Discussion

In the discussion, we first aimed to examine how video games provide an effective platform for self-expression. From the empirical research, we identified three major themes the interviewees deemed necessary in their self-expression process within gaming. Indeed, gamers can escape their reality through anonymity and by building a community. Through these elements, gaming provides valuable tools for self-expression. Second, we uncovered the general process in which gamers construct their online identity. As established by Belk (2013), we revealed that it is through the customization of avatars and the process of re-embodiment that gamers can express parts of their identity. Finally, we applied Bartle's (2014) taxonomy of player types to reveal how the self-expression process might differ according to the preferences of each player. To do so, we analyzed the differing tendencies to customize their avatars and make in-game purchases.

## 5.1 Gaming as a Platform for Self-Expression

### 5.1.1 Escapism

Most of our interviewees expressed that they use gaming to escape reality. Our interviewees are either students or working and face stressful and intense routines. By immersing themselves in a fantasy realm, they can take their minds off this burden and focus on something more enjoyable. As mentioned by Isabel (interview, 19 April 2022) and Robbie (interview, 15 April 2022), gaming provides a break from the world and allows them to wind down. The distractions offered by games have turned gaming into a lifelong hobby for many individuals in this study.

The years spent on this hobby have sometimes turned the gaming world into people's preferred reality. As mentioned by Charlie (interview, 14 April 2022), certain gamers prefer their virtual world, where they feel more important and valued than they do in real life. Sierra (interview, 13 April 2022) and Kevin (interview, 15 April 2022) both went through similar experiences wherein they were bullied and ignored in real life. They both turned to video games to feel heard. For instance, Sierra (interview, 13 April 2022) finally expressed her true personality,

which she felt uncomfortable doing in real life. Sierra managed to escape her difficult reality by finding an environment where she was anonymous and could be whomever she wanted. To compensate for things they lack or find an enjoyable hobby, people turn to gaming, which offers a high level of anonymity and a supportive community.

### 5.1.2 Anonymity

The anonymity provided in gaming was a central component in Sierra's (interview, 13 April 2022) escape from her painful reality. As Alex (interview, 14 April 2022) explained, gaming allows individuals to be concealed by a username and a VPN, disguising users' true identities. Through anonymity, people can hide behind their screens and not be held responsible for their actions. Anonymity allows gamers to act however they desire and express themselves freely. For instance, Sierra (interview, 13 April 2022) could be herself in a way that she could not in reality, and through games, she was able to convey her personality in a judgment-free way.

Several interviewees mentioned how anonymity facilitates relationship building. Many stated that they had formed lifelong friendships with players that they had never met in real life. Instead, they have always only known the other gamers' usernames, avatars, and voices. Interviewees such as Jacob expressed a lack of need to know what their online friends looked like in real life and believed the representational tools in games to be sufficient. Sierra (interview, 13 April 2022) thought that the other players' personalities always shone through, regardless of how their avatar looked. Consequently, the gaming platform and the tools provided, such as avatars, voices, and usernames, are practical enablers of self-expression (Wallace, 2008).

The anonymity of the gaming platform gives players the freedom to be whomever they want, for better or worse. As such, anonymity also brings about more opportunities for toxicity. Indeed, Peter (interview, 15 April 2022) mentioned that without seeing the person behind the screen, players allow themselves to be more hateful and rude to others. Robbie (interview, 15 April 2022) believed gamers could be much more aggressive when they are not held personally accountable for their actions.

### 5.1.3 Community

A way for gamers to reveal or express a suppressed part of themselves is through supporting communities. As mentioned by many interviewees, the gaming industry is continuously growing. As a result, new communities are emerging on and off the gaming platforms, allowing individuals to find the community that matches their needs. Sabrina explained that whomever a person is and whatever game they play, they will eventually be able to find like-minded people to exchange advice with and get inspired.

In some cases, the community can offer game-related tips, but it can also offer psychological support. Isabel (interview, 19 April 2022) explained that, through game-specific communities, she often seeks help to advance in the game. Then, in games like *Celeste*, the community focuses more on equality and offers a safe space for transgender individuals to share life experiences. Kevin (interview, 15 April 2022) mentioned that gamers play *Celeste* in an attempt to find people they can talk to. The support and solace offered by these communities can surpass players' real-life community and often becomes a central part of their lives. This environment allows gamers to safely express themselves as they do not fear other people's judgment. The expansive gaming world can therefore be viewed as an effective platform for self-expression.

## 5.2 Avatar Customization and Self-Expression

As demonstrated in the previous section, gaming is a convenient platform for self-expression through its numerous advantages and specificities. In this part, we introduce the process of avatar customization based on Belk's (2013) findings on re-embodiment. We built upon Belk's (2013) concept of re-embodiment, and it is clear that an important pathway through which gamers can express their identity is by customizing avatars. As such, we have drawn a parallel between Belk's (2013) findings to draw a general conclusion about the process by which gamers express parts or all of their identity.

Several interviewees have mentioned using avatars to escape their burdensome reality and be their ideal selves. After customizing the avatar's physical appearance, Belk (2013) also

described naming one’s avatar as an essential act of identity construction online. Gamers use these customization tools as a gateway for self-expression, reinforcing the attachment to their avatars. To illustrate Belk’s (2013) findings and apply them to this study, we developed a conceptual framework for Belk’s re-embodiment process, as seen in Figure 3. The interviewees also mentioned using these customization tools to convey personality traits or personal aspirations. For instance, Sierra (interview 13 April 2022) customized and named her avatar in a way to resemble herself in reality. This allows her to express parts of herself in creative ways. She feels a strong attachment to her avatars by projecting herself onto them.

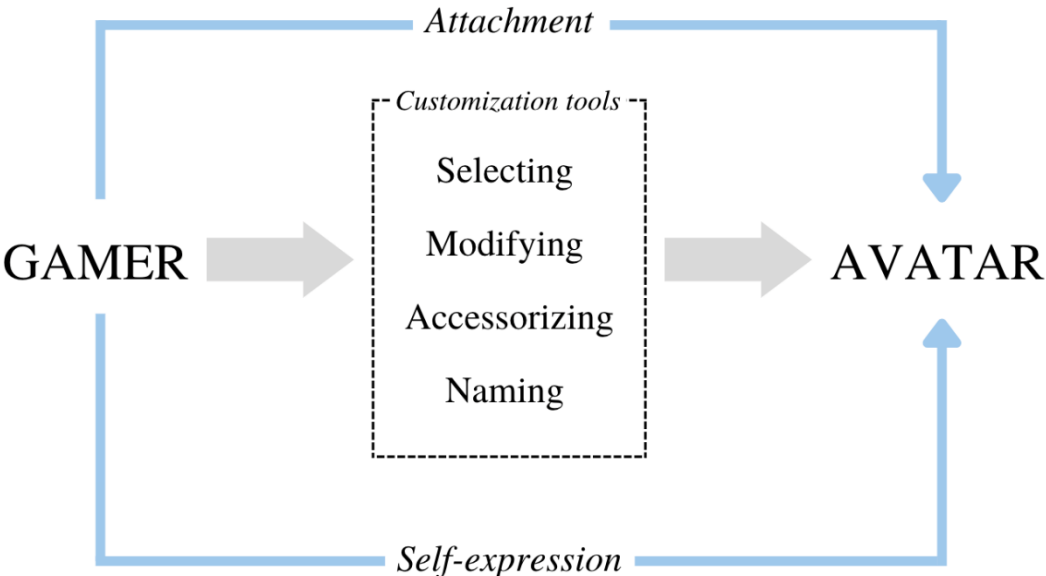


Figure 3: Conceptual Framework of the re-embodiment process (adapted from Bartle 2013)

Similar to Belk’s (2013) findings, this study revealed that a player’s first avatar holds significant value for the user since it became representative of their youth when they first started gaming. Our interviewees expressed that by customizing their avatars and using them over time, they have formed a strong attachment to them. Many interviewees believed this bond was driven by nostalgic value. Indeed, most interviewees have played these games with these avatars for years and admitted they would feel extreme sadness if they were ever to lose them.

Likewise, Belk (2013) claimed that the player-avatar bond keeps gamers engaged and drives them to continue playing over the years. He explained that this bond is strengthened by the in-

game memories and friendships acquired over time that form their online identity. Many of our interviewees could reflect on their gaming experience, remembering intricate details about the games they have played, the players they have met, and the avatars they have used. For example, Alex (interview, 14 April 2022) shared a story about a player he met a few years back, remembering distinct details about their encounter and his initial thoughts upon meeting him.

This study has highlighted a general trend confirming Belk’s theory (2013) on re-embodiment. Like Belk (2013), our interviewees have disclosed attaching value and affection to their avatars. However, the avatar customization and self-expression process appear to differ based on the various player types. The self-expression phenomenon will be extended to each of Bartle’s (2014) player types in the following section.

## 5.3 Player Types and Self-Expression

### 5.3.1 Sample Classification

*Table 2: Sample Classification*

Alias	Player Type	In-Game Purchases	Game	Avatar
Mike	Achiever (Socializer)	Yes, functional purchases	Counter Strike: First-Person Shooter; World of Warcraft: fantasy role-playing	Adaptive to story and background of character
Alex	Achiever (Explorer)	Yes, non-functional (gun skins)	Valorant: First-Person Shooter	Looked human at first, now prefers characters that look “cool” & have nice animations
Robbie	Achiever (Socializer)	Yes, functional purchases	League of Legends: Online Battle Arena; Counter Strike: First-Person Shooter;	Aesthetically pleasing, makes people laugh

			World of Warcraft: Fantasy Role-Playing	
Charlie	Killer	Yes, non-functional (gun skins) and functional purchases	Call of Duty: First-Person Shooter	Random avatar, basic features
George	Killer (Socializer)	Yes, non-functional (skins) and functional purchases	Call of Duty: First-Person Shooter; Minecraft: survival game; League of Legends: Online Battle Arena	Scary, displays terror
Liza	Achiever (Explorer)	Yes, but prefers to unlock skins through achievements	Horizon Zero Dawn: Storytelling Adventure	Funny looking, as ugly as possible
Kevin	Explorer	Yes, non-functional (cosmetics) and functional purchases	Celeste: Storytelling Adventure, Hitman: Storytelling Adventure	Wants them to look like the main character of his favorite game
Isabel	Explorer	Yes, non-functional (skins)	Genshin Impact: role playing, open-world action, Little Nightmares: horror adventure & Last of Us: action adventure	Chooses characters based off background and storyline
Jacob	Socializer	Yes, non-functional (skins and cosmetics)	Rocket League: fantastical sport-based, FIFA: EA sports and Fortnite: battle, survival	Blond girl

Peter	Socializer	Yes, non-functional (skins)	League of Legends: online battle arena, The Witcher: role playing	Most human looking character
Sabrina	Socializer	Yes, non-functional (skins)	GTA 5: action, adventure, League of Legends: online battle arena, Call of Duty	Crazy, badass character, artsy
Sierra	Socializer	Yes, non-functional (skins and cosmetics)	Lost Ark: fantasy role playing	Wants character to look like her

Bartle (2014) presented a taxonomy of player types which includes achiever, explorer, killer and socializer. He stated how each of these player types are unique in their personality and gaming behavior. Through our interviews we identified each interviewees categorization and behaviors. We further applied Bartle’s (2014) taxonomy to see how each player type self-expressed differently, in relation to their purchases and interaction with the gaming community.

### 5.3.2 Socializer

According to Bartle (2014), the socializer player type prioritizes the inter-player relationships rather than the game itself. In other words, the game's primary role is to act as a common ground for players to connect. All the socializer interviewees mentioned the social nature of gaming as their main attraction. Socializers also aim to form long-lasting relationships with other players (Bartle, 2014). Jacob (interview, 20 April 2022) mentioned he had formed over 15 close friendships through gaming in the past year. Our interviewees who consider themselves socializers look to gaming for social interaction and achieve this by entertaining, listening to, and joking with other players.

The importance of social interaction emphasizes the need to care for and invest in one's looks. Therefore, all the socializer interviewees admit to spending the necessary time and effort to customize their avatar and make their virtual appearance more appealing. To do so, Peter (interview, 15 April 2022) explained that free-customization options were insufficient to

express and differentiate himself. Instead, he had to make in-game purchases to look better and different from other players. The gaming culture also has a typical stereotype of beginner players having basic skins. Socializers tend to buy in-game purchases to avoid falling victim to these stereotypes. They do not necessarily desire to be perceived as the best player, as long as they are not perceived as novice gamers. Essentially, the social nature of gaming and the community's pressure is the primary driver of in-game purchases for socializer players.

Sabrina (interview, 19 April 2022) mentioned that she relies on in-game content, such as skins, to spark conversation with other players. She enjoys commenting on other avatars' appearances, whether positive or negative. Another motivation behind the purchase of skins is the desire to appear a certain way in front of others. Sierra (interview, 13 April 2022) said that she buys excessive skins because she gets bored of her online outfits or skins. She compared it to real life, where she often changes her outfits so other people do not see it as repetitive. In the game, she expressed that she desires to look as cool as possible and put her best foot forward because she considers her avatar an extension of herself. Sierra wants others to perceive her as someone with a fun personality and slightly rebellious, the way she also wishes to be seen in real life.

In addition, all socializers mentioned that they prefer to use human-looking characters to interact with others. Peter (interview, 15 April 2022) explained that games are complex and intensive; thus, having a human character can provide a sense of ease and recognition. By choosing a human character, Peter wanted to look comforting to other players and have more opportunities to socialize (Guo & Barnes, 2009). Some socializers go as far as to create characters that look like them in real life. Sierra (interview, 13 April 2022) creates characters to look like herself in an attempt to live through and further identify with her avatar.

As explained by Bartle's Taxonomy (2014) and further supported by our interviews, we can conclude that socializer player types are typically social beings in real life. Many players feel that avatars are a direct representation of themselves, which partially explain why they are so emotionally attached to them. Peter (interview, 15 April 2022) explained that if he played alone, he would not make these purchases, which further proves that they mainly purchase in-game content to impress others. The importance of the community for socializers pushes them to express an accurate and representative version of themselves to other players. As such, socializers use functional purchases such as skins and cosmetic items for self-expression in order to impress their community.



Socializers use in-game purchases to present themselves favorably, express their personality traits and fashion sense, and overall look their best. For example, Sierra (interview, 13 April 2022) wanted to dress edgy and rebellious in real life but was unable due to social standards. As such, she turned to gaming and in-game purchases to express herself. We can infer that many socializers use in-game purchases for self-expression as there is a wider variety of options and fewer restrictions in online games than in real life.

### 5.3.3 Explorers

According to Bartle (2014), explorers' primary objective in games is discovery, investigating internal elements, and having an element of surprise. "It is the sense of wonder which the virtual world imbues that they crave" (Bartle, 2014, p. 7). Explorers rely on the community to uncover the game's hidden quests and secret elements. Isabel mentioned that she often seeks advice through her community to uncover novel elements of the game. In addition, explorers are incredibly proud of their knowledge of the game and enjoy uncovering as much as possible. Kevin (interview, 15 April 2022) expressed that he could walk around the game map for hours searching for various hidden rewards and internal bugs of the game. He has even streamed gaming sessions to assist other users and display his skill set. Unlike other players, the explorer considers gaming a hobby like gardening, reading, or cooking, which they aim to master (Bartle, 2014).

Isabel (interview, 19 April 2022) mentioned that she makes in-game purchases to help her immerse herself in the virtual world of a game. Explorers are interested in storytelling games because it allows them to build their own stories by creating and customizing avatars. Storytelling games are also beautiful for explorers as they allow them to control their virtual world. Explorers such as Isabel (interview, 19 April 2022) and Kevin (interview, 15 April 2022) feel particularly drawn to these games and their storylines.

Isabel (interview, 19 April 2022) is drawn to the storyline and tries to match her avatars to the game's background. However, Kevin (interview, 15 April 2022) is compelled by a particular game, *Celeste*. In other games, he tried to showcase his admiration by making his avatars resemble the main character in *Celeste*. Therefore, customizing and upgrading their avatars can be vital to them. However, unlike socializers, they do not view their avatars as a reflection of

themselves but instead view them as a separate entity. Explorers view their avatars as their best friends and personally feel the hardships the avatars are going through in the game.

Both explorer interviewees looked for similarities and common points between themselves and their avatars. Isabel (interview, 19 April 2022) acknowledged that helping her characters makes her feel like a better person. As she nurtured her characters and assisted them in their development, it helped her grow as a person. The importance of these avatars for her personal development facilitates a strong connection between the player and the avatar. The attachment felt towards these avatars can explain why explorers such as Isabel (interview, 19 April 2022) are willing to spend resources on customizing and enhancing these virtual characters through non-functional purchases.

As noticed in the interviews, explorers also make functional purchases to advance in the game. Bartle (2014) explained that unlocking new levels may be necessary to enter the next exploration phase. As such, explorers like Kevin (interview, 15 April 2022) bought functional in-game purchases to reach new levels and continue their game exploration. Regardless of the type of in-game purchase, explorers buy them to show off their knowledge to other individuals in the gaming community. Isabel (interview, 19 April 2022) mentioned that she buys a monthly subscription to get rare and limited-edition items. Explorers buy in-game content to express themselves as excellent and passionate gamers and intelligent individuals who can navigate the game's complex intricacies. In addition to their mastery of the game, explorers expressed a deep attachment to their avatars. Another incentive for them to make in-game purchases is to take care of their beloved characters.

#### 5.3.4 Killers

In Bartle's (2014) article, he defined killers as players who want to demonstrate their superiority. In this study, we discovered that killers typically choose shooter games where they can cause distress and kill other players. Both killers in this study played aggressive games such as Call of Duty to feed into their competitive nature. Indeed, like what Bartle (2014) described as "adrenaline-shooting juicy fun," Charlie (interview, 14 April 2022) experienced dopamine and excitement from killing (p.5). Likewise, Bartle (2014) explained that video games are similar to sports like hunting or fishing for killers. Individuals partake in these activities to assert their power over something and feel the exhilaration of hitting the target.

Most of the thrill is found in killing or being higher ranked. As a result, killers do not take priority in customizing their avatars. The highly competitive nature of the games played by killers inhibits them from engaging with the community the way socializers do. Shooter games do not always provide the opportunity to create and customize avatars and interact with other players. Instead, in the first-person perspective, the avatar often appears as a weapon ready for attack or defense (Appendix B). Hence, killers are used to spending money on functional in-game purchases. Thus, when allowed to create an avatar in a new game, they often disregard the possibility of doing so.

Killers mainly buy functional in-game content to advance and conquer games. The only non-functional purchases they make are used to terrorize others, such as George (interview, 12 April 2022) in Minecraft. Through a scary and mysterious skin, George (interview, 12 April 2022) tried to scare other players and manipulate them into fearing him. The perceived disposability of their avatars inhibits killers from forming an attachment or a bond to their characters the same way other player types do.

From the interviews, we can conclude that killers purchase in-game content to express themselves as better players. For example, Charlie (interview, 14 April 2022) has purchased gun skins in Call of Duty and saw them as tokens of achievement for his in-game skillset. Similarly, George has purchased scary avatars to fuel his killer personality by causing distress and terrorizing other players. They use in-game purchases to express their personality traits through the game. As Bartle (2014) stated, killers tend to be more toxic and angrier. However, these traits are a form of self-expression for the killers. Our interviewees claim they are calm and collected in real life but can express a non-socially acceptable part of themselves through their avatars and in-game purchases in gaming.

### 5.3.5 Achievers

Achievers are the most complex player type of them all. Bartle (2014) stated that they tend to waver between two player types. This has been confirmed by our achiever interviewees, who also related to a secondary player type. These respondents claimed to game for more than one reason and identified with socializers or explorers.

Achievers' primary goal is to collect points and advance quickly in the game. Robbie (interview, 15 April 2022) explained that his attraction to gaming stems from the ability to challenge himself. He compared gaming to competitive sports, as he turned to gaming after quitting hockey, which he was playing professionally. Like Bartle's (2014) conclusion on achievers, Robbie (interview, 15 April 2022) compared gaming to competitive games like tennis, chess, or hockey. Achievers like to advance in the game because they tend to be so fully immersed and invested in the virtual world of gaming. Indeed, Bartle (2014) explained that the immersive gaming potential is also highly valued by achievers. Mike (interview, 12 April 2022), who identified as both an achiever and a socializer, mainly valued his performance; however, he also emphasized his avatar. In games such as World of Warcraft, Mike (interview, 12 April 2022) fabricated an entire backstory for his avatars, demonstrating his total immersion in the game.

Above all, achievers prefer to unlock in-game content through in-game performance. Liza (interview, 19 April 2022), for instance, explained that in-game purchases are only valuable if she has unlocked them through her gaming achievements. When she obtained these rewards, she appreciated positive feedback and recognition from other players. Most achievers have purchased functional in-game content to further advance in the game. Their drive for performance urges them to make in-game purchases to enhance their abilities in the game and unlock new levels faster. Robbie (interview, 15 April 2022) used real money to advance in the game instead of spending time and effort to collect in-game currency, which he believed set him further away from his ultimate goal of success.

Achievers tend to play first-person shooter games. However, due to the repetitive nature of these games, achievers often get bored. As such, achievers like Mike (interview, 12 April 2022) use in-game purchases to alter the game and make it more interesting. Robbie (interview, 15 April 2022) usually chose aesthetically pleasing avatars to make his gaming experience more visually appealing and enjoyable when given the opportunity. Alex (interview, 14 April 2022) mentioned that some first-person shooter games, such as Counter-Strike and Valorant, do not offer specific avatar customization; thus, gun-skins are the only way to make the game more captivating. In this case, gun skins are purchased to customize and personalize one's experience. This differentiates achievers from the other player types as they claim to purchase non-functional in-game content for themselves and not in an attempt to receive praise from other gamers.

As seen through the interviews and Bartle's (2013) article, we can conclude that achievers are mainly focused on their development. Their fundamental priority is advancing in the game, and if they buy in-game content, achieving a more compelling and immersive gaming experience is essential. To achievers, purchasing non-functional in-game content is never something they expect praise for; the only instance where they would expect recognition is when they unlock skins through quests. They value achievements and hard work and offer positive feedback when they see other gamers with similar values putting effort into unlocking rewards. To achievers, functional in-game purchases are a way for them to give in to their competitive nature by helping them advance through levels. Both functional and non-functional in-game purchases can be seen as a testimony to their hard work and a source of pride. As a result, it allows achievers to express their ambitious personalities and winning mentality.

# VI. Conclusion

## 6.1 Research Aims and Objections

The initial aim of this study was to destigmatize gamers of the traditional stereotype and its negative implications. Many people believe that spending too much time playing video games is harmful and a waste of time (Konstam, 2014). Through this research, we have shown that gaming can be beneficial and help individuals in their self-expression. In addition, we have found that the communities around gaming can provide valuable support and help individuals go through troublesome times in real life. Throughout the positive approach of this research, we hoped to have inspired future researchers to investigate the numerous benefits of gaming.

Additionally, this paper aimed to expand upon Belk's (2013) theory on the extended self in digital settings. This study has found evidence confirming Belk's (2013) findings and his comparison of digital and physical possessions through the process of re-embodiment. However, this study has also encountered contradicting findings that will be discussed in the theoretical implications. Then, by analyzing Bartle's (2014) player types, we have cast his research in a new light. Indeed, this research has modernized Bartle's (2014) framework by investigating avatar customization and in-game purchases. This study also elaborated on the player types and their different approaches to self-expression by integrating new concepts into his model.

Throughout the existing literature, we realized that gamers could often be irritated with the marketing of in-game purchases (BBC, 2021). As a result, in this study, we aimed to provide a marketing perspective and present marketers with insight into how to sell in-game content to gamers effectively. The main objective was to minimize the discrepancy between marketers and gamers. Once marketers understand the different incentives and needs behind the purchases of each player type, they will be able to target different content to specific player types. This new insight will allow in-game content developers to understand each player type on a deeper level and, as a result, market more personalized content.

This paper's various aims and objectives give this research a unique perspective. The findings are beneficial to a variety of people. We could conclude that nowadays, gaming offers a diverse

platform for gamers' different needs. Indeed, through various game genres, individuals can find a suitable game to fit their needs. Players chose games based on their player type as well as the different communities around these games. In addition, gaming offers anonymity where people can express their true selves without facing any real consequences. The virtual gaming world is like a creative playground where gamers can purchase various in-game content to differentiate from other players. By customizing one's avatars and making in-game purchases, gamers can create the character they want and build a personalized experience.

## 6.2 Theoretical Implications

Throughout this study, we have provided a novel perspective on gaming and self-expression. This research has partially confirmed some of Belk's (2013) findings and illustrated how gamers get attached to their avatars the way they do with physical possessions. Players extend themselves to their avatars by investing time and effort, also known as psychic energy, to customize their gaming experience. Several interviewees explained that they value some items acquired through in-game purchases more than some of their physical possessions. This contrasts with Belk's (2013) conclusions about physical commodities being more efficient for self-expression than digital possessions. However, according to our interviewees, the intangibility and immortality of virtual purchases make them more valuable and desirable.

We revealed certain inconsistencies and limits to Belk's (2013) research once we applied the different player types. Belk (2013) stated that expressing oneself through games is expensive, requiring players to acquire an HD TV, a console, and game software. This is somewhat different from what we uncovered in this study. For instance, Liza (interview, 19 April 2022) explained that in her early gaming days, she had no financial resources to acquire expensive video game equipment and had to rely on affordable alternatives. Nonetheless, she fully immersed herself in the games' storylines and expressed her player type. In addition, we discovered that an increasing number of games are free-to-play games. Expressing oneself through video games does not need to be expensive, contrary to what Belk (2013) wrote. Nonetheless, our interviewees mentioned that in order to enjoy further and personalize the gaming experience, they might need to pay.

In this study, we uncovered that for people who had grown up with video games, these tend to play a more significant role in their lives. The central place of video games and technology in our respondents' lives has enabled them to feel a stronger attachment to their avatar than Belk (2013) had predicted.

This study has confirmed Bartle's (2014) definitions of the different player types and uncovered additional insights into his theory. While Bartle (2014) focused on categorizing and defining each player type, this study has applied his definitions to a particular phenomenon. Indeed, this study has made this model more relevant to future research by relating in-game purchases and self-expression to particular player types.

Ultimately, this study has contributed to the existing gaming literature by incorporating Bartle's (2014) player types to Belk's (2013) theories. This study revealed that in-game purchases help gamers with self-expression, but the incentives behind these purchases can differ depending on the player type.

In our research, we have noticed that explorers purchase in-game content for status and prestige. Achievers' motivations are closely aligned to solving in-game problems and moving forward in the game. Socializers buy in-game content for belonging and status, while killers' incentives are essential to gain prestige and be the best at the game. These differences drive these players to use avatars and in-game purchases in different ways for self-expression. By combining these studies, we hoped to have established a new angle on the gaming literature and inspired future research.

### 6.3 Practical Implications

This study aimed to enlighten marketers and game developers while creating and advertising in-game content. By identifying the different player types and their preferred game genres, we understood how in-game purchases help the different players express themselves. We found that socializers prefer role-playing and adventure games, where non-functional items are frequently purchased. Creating more graphically attractive, diverse and aesthetic skins and cosmetics is expected to be more rewarding for developers.



Explorers generally prefer storytelling games with intricate maps and details. Developers need to continue updating the content to ensure that gamers stay interested. In addition, developers can heighten explorers' interests by offering unique skins and cosmetics, giving incentives to continue exploring the games. Killers mostly play shooter games and are mainly interested in making functional purchases. Therefore, developers should focus on creating new weapons to attract killers to make in-game purchases. Lastly, the achievers who play both shooter and role-playing games are most difficult to please. Some achievers enjoy customizing their avatars, but generally, it seems that achievers make functional purchases to advance in the game. Developers have yet another incentive to create exciting content to help players advance in first-person shooter games. Nevertheless, the dual tendencies of achievers make it more difficult to predict their purchasing behaviors. Unlike other player types, achievers do not make in-game purchases to impress others; they do it solely for themselves and their advancement in the game.

Marketers can target specific player types but according to Bartle (2014), having all the players in one game is essential. He explained that the overall balance and playability of the games depend on the presence of all player types. They all build on each other and are essential for one another. More specifically, he explained how a decline in the number of explorers would reduce the number of achievers, as they would not have anyone to rely on to uncover new ways of unlocking levels and rewards. The decrease in the number of overall players would reduce socializers' willingness to play as they would have fewer people to connect and socialize with. Lastly, killers would quit the game as they would have fewer players to impress and dominate. As such, when designing in-game content, developers must be cautious about who they target and what this implies for other player types. The game's balance needs to be constantly reviewed and considered to ensure the game stays playable and exciting.

Furthermore, by interviewing 12 gamers, we have also uncovered unanticipated findings. Indeed, most interviewees had played specific games for almost a decade or more. They associated this commitment with nostalgia and time dedication. Our respondents also mentioned that they could continue playing these games because of the new content launched by developers or through the in-game purchases they made. These customizations inhibited players from getting bored and drove them to return to the game in question continually. Researchers Cleghorn and Griffiths (2015) have also established a positive correlation between the time spent playing with an avatar and the propensity to make in-game purchases. Therefore,

it seems more beneficial for developers to continue developing on an existing game instead of creating a new one. These games will continue to be profitable using the established and loyal consumer base; developers can expect to make more money. Then, the social features of gaming will drive new players to these older games because of their long-standing and established communities.

Regardless of what marketers choose, this study has also revealed the need to be cautious with marketing in games. Indeed, the literature and several interviewees have mentioned their disapproval of pay-to-win games and in-game advertising. Some have even mentioned quitting a game they cherished because revenues and purchases drove it. As such, marketers need to be cautious in their use of in-game purchases. Providing gamers with the possibility to make in-game purchases is good; however, spending money should not be central to progress in the game.

## 6.4 Study Limitations

### 6.4.1 In-Game Purchases

In this research study, our goal was to find out how avatars and in-game purchases help gamers with their self-expression. We discussed the entire category of in-game purchases, functional and non-functional purchases, and how they are related to gamers' self-expression. However, as we discussed both types of purchases, this could be a limitation because our findings might be considered too broad. Our findings may have been more detailed if we focused on either of these purchases.

### 6.4.2 Interviews

There are some limitations regarding interviews; however, these stayed at the forefront of our minds when we conducted them. At times, obtaining trust between the participant and researcher may be difficult. Using the appropriate language and having the right attitude can solve this issue. If the interviewer is welcoming and kind, obtaining trust is much easier. However, if the interviewer does not have the right attitude and uses negative language when conducting the interview, it can be another limitation. As interviewers, we have been respectful

and considerate towards our respondents. All the interviews went well, and the interviewees seemed comfortable and honest in their answers. Nonetheless, the possibility that our respondents were not completely truthful in their answers remains, which may limit our findings.

Additionally, getting access to the right participants is crucial for interviews. If the people in one's direct networks do not fit the criteria for the targeted participants, searching for participants may be very time-consuming. For this research, we could reach out to different types of gamers through our networks. However, it is possible that having access to more gamers may have yielded different findings. Indeed, we may have found more relevant interviewees by having more time and resources to find more respondents.

We did not specify gender in our search for interviewees, which could potentially impact our findings. The majority of our interviewees were as the proportion of male to female interviewees was 2 to 1. In 2021, it was noted that the global proportion of female gamers was 45%, while males were 55% (Statista, 2021c). A ratio of male and female gamers similar to the global one might have allowed us to represent the gaming community more accurately.

Lastly, all of the interviews were conducted via Zoom. There are many benefits to conducting interviews online, but the video conferencing platform may also affect our findings. It is harder to take notes and observe someone's physical responses through video. Non-verbal cues can be very beneficial in detecting how a person responds and reacts to a question. Writing these notes can help an interviewee see if they are excited, nervous, or uncomfortable, which can help in the analysis process. As such, being unable to detect physical cues of stress or anxiety may have limited our ability to obtain entirely honest answers.

### 6.4.3 Philosophical Assumptions

By taking on a constructionist epistemology, we were able to uncover a variety of findings. We have attempted to combine some of these under the framework of the different player types. However, each player's experience differs to some extent and may be influenced by external factors that we have not considered. One of our interviewees, Liza (interview, 19 April 2022), mentioned that, in her opinion, the drive to make in-game purchases also depends on cultural factors. She believed Dutch people to be somewhat frugal and Americans to be more frivolous

and mindful of their appearance. As such, she assumed that Americans would tend to make more in-game purchases on average than Dutch gamers. Hence, the constructionist approach of this research made it difficult at times to accommodate all the institutional or cultural differences between individuals.

#### 6.4.4 Generalizability

A potential limitation to this research study could be the inability to generalize our findings to the entire gaming community. The findings of this study were based on 12 interviews. This is a fair number of interviews for a research study. However, because the gaming community is so international and vast, our findings may be based on the specific people we have interviewed. In addition, various factors influence the constructionist epistemological approach; as a result, it could raise many different viewpoints. This study has attempted to make the results more generalizable by integrating the different player types. However, considering all external factors impacting the respondents' gaming experiences and purchasing behaviors is impossible, making generalizing the results complicated.

### 6.5 Future Research and Recommendations

Players in this study have expressed changes in their gaming needs over time. In their earlier gaming stages, players were more focused on making friends but have become more driven by achievements and in-game progress. These changes suggest that some of our interviewees have not always been the player type they identify with today and that it might evolve. As such, it might be interesting to develop Bartle's (2014) theory further to examine the evolution of player types over time. For instance, by studying a group of gamers extensively, researchers could identify the process of becoming a particular player type.

This study uncovered significant differences between each player type. However, certain interviewees also revealed that cultural differences might also explain some changes in behavior. The gaming community is so international that we have decided not to focus on a particular country or geographical zone. However, it may be interesting for future researchers to compare several countries and understand if cultural norms and values influence individuals' propensity to make in-game purchases.

A significant amount of our interviewees noted how female players get treated differently and are more targeted than their male counterparts. Indeed, they tended to receive more assistance and gifts. They are also often harassed and underestimated by other players in the game. As such, many female participants in this study mentioned that they chose to play with male avatars to avoid this treatment. At the same time, male participants stated that they enjoyed playing with female characters because they got special treatment. Male participants explained that using a female avatar felt rather beneficial and agreeable. Therefore, it would be interesting to uncover how avatar customization differs between genders.

The continuous technological development is creating a host of new means for self-expression within the virtual world. For instance, with the emergence of cross-game avatar platforms, such as Ready Player Me, gamers can now use the same avatar in different games (Dargan, 2022). Then, new technologies like Augmented Reality or Virtual Reality are increasing users' immersion in the game (Marr, 2022). Consequently, there is a need to investigate how this might impact players' attachment to their avatars, which currently is not provided by the existing body of research.

In addition, the more recent development of the metaverse, a single and universal virtual world, might affect the consumption and the creation of in-game purchases. It is expected that digital items in the metaverse will be able to be used across various virtual worlds, including games. Nevertheless, the idea of cross-platform avatars was not necessarily appreciated by the interviewees of this study. Some of them expressed that avatar aesthetics and design vary significantly across games and mixing them would undermine the uniqueness and integrity of each game. There is a gap between metaverse developers and gamers regarding whether avatars should be moved freely from one game to another. This gap might be interesting to research in future studies.

Moreover, many celebrities and brands have started collaborating with various video game companies to develop branded in-game content. For example, the luxury fashion brand Balenciaga recently collaborated with Fortnite to release exclusive in-game apparel (Yokta, 2021). Such partnerships allow gamers to create high-end looks for their characters, which can be viewed as an additional tool for game-related self-expression (Yokta, 2021). We recommend

that future researchers investigate how branded in-game purchases might impact gamers' self-expression online.

## VII. References

Anderton, K. (2018). The Ongoing Controversy Of Microtransactions In Gaming, *Forbes*, Available online: <https://www.forbes.com/sites/kevinanderton/2018/03/07/the-on-going-controversy-of-microtransactions-in-gaming-infographic/?sh=301adbe11d9c> [Accessed 25 May 2022]

Aroged. (2022). Microtransactions and DLC generate more non-mobile revenue than game sales. Available online: <https://www.aroged.com/2022/02/09/analyst-microtransactions-and-dlc-generate-more-non-mobile-revenue-than-game-sales/> [Accessed 2 May 2022]

Bargh, J., McKenna & K., Fitzsimons, G. (2002). Can you see the real me? Activation and Expression of the true self on the internet. *Journal of Social Issues*, vol. 58, no. 1, pp. 33-48. Available online: <file:///C:/Users/33602/Downloads/bargh.pdf> [Accessed 5 May 2022]

Barth, N. (2018). Microtransactions: Positives and Negatives of the Industry Wide Practice, *Twin Galaxies*, Available online: [https://www.twingalaxies.com/feed\\_details.php/444/microtransactions-positives-and-negatives-of-the-industry-wide-practice](https://www.twingalaxies.com/feed_details.php/444/microtransactions-positives-and-negatives-of-the-industry-wide-practice) [Accessed 20 April 2022]

Bartle, R.A. (2014). Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDS, *Journal of MUD Research*, Available online: <https://bit.ly/3O0kYfA> [Accessed 15 March 2022]

BBC. (2021). Are in-game purchases ruining mobile video games? Available online: <https://www.bbc.com/news/newsbeat-56215030> [Accessed 4 May 2021]

Beek, J., & Gipp, B. (2009). Google Scholar's ranking system algorithm: an introductory overview. *Proceedings of the 12th international conference on scientometrics and infometrics*, vol. 1, pp. 230-241. Available online: <https://docear.org/papers/Google%20Scholar's%20Ranking%20Algorithm%20--%20An%20Introductory%20Overview%20--%20preprint.pdf> [Accessed 20 May 2022]

Belk, R. (1988). Possessions and the extended self. *Journal of Consumer Research*, Available at: <https://academic.oup.com/jcr/article/15/2/139/1841428?login=false> [Accessed 4 March 2022]

Belk, R. (2013). Extended Self in a digital world. *Journal of Consumer Research*, vol.40. Available online: <https://academic.oup.com/jcr/article/40/3/477/2379767?login=true> [Accessed 27 April 2022]

Blinka, L. (2008). The Relationship of Players to Their Avatars in MMORPGs: Differences between Adolescents, Emerging Adults and Adults. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, vol 2, no. 5, Available online: <http://cyberpsychology.eu/view.php?cisloclanku=2008060901&article=5> [Available 9 May 2022]

Bowen, L. (2014). Video game play may provide learning, health, social benefits, review finds, *American Psychological Association*, Available online: <https://www.apa.org/monitor/2014/02/video-game> [Accessed 25 May 2022]

Chen, H., & Chen, H. (2020). Understanding the relationship between online self-image expression and purchase intention in SNS games: A moderated mediation investigation, *Research Gate*, vol. 112. Available online: <https://www.sciencedirect.com/science/article/pii/S0747563220302296> [Accessed 25 May 2022]

Cleghorn, J., & Griffiths, M. (2015). Why do gamers buy “virtual assets”? An insight in to the psychology behind purchase behavior, *Digital Education Review*, Available online: [https://www.researchgate.net/publication/276265219\\_Why\\_do\\_gamers\\_buy\\_virtual\\_assets\\_An\\_insight\\_in\\_to\\_the\\_psychology\\_behind\\_purchase\\_behavior](https://www.researchgate.net/publication/276265219_Why_do_gamers_buy_virtual_assets_An_insight_in_to_the_psychology_behind_purchase_behavior) [Accessed 25 May 2022]

Crawford, G. & Muriel, D. (2018). Video games as culture. London: Routledge

Csikszentmihalyi, M. (1982), The Symbolic Function of Possessions: Towards a Psychology of Materialism, *American Psychological Association*.



Dargan, J. (2022). Ready Player Me: Designers of cross-game avatars for the metaverse, Available online: <https://metaverseinsider.tech/2022/03/09/ready-player-me-designers-of-cross-game-avatars-for-the-metaverse/> [Accessed 26 May 2022]

Dindar, M., Ortiz de Gortari, A. (2017). Turkish validation of the Game Transfer Phenomena Scale (GTPS): Measuring altered perceptions, automatic mental processes and actions and behaviours associated with playing video games. *Telematics and Informatics*, vol. 34, pp. 1802-1813. Available online: <https://www.sciencedirect.com/science/article/pii/S0736585317306214> [Accessed 10 May 2022]

Driscoll, D. (2011). Introduction to Primary Research: Observations, surveys and interviews, In *Writing Spaces, Reading on writing*, vol. 2, pp. 153-174

Easterby-Smith, M., Thorpe, R., & Jackson, P. (2015). *Management & Business Research*, SAGE.

Embaugh, K. (2016) Local Co-Op is The Most Consistently Appealing Mode of Social Gaming Across Gender and Age, *Quantic Foundry*, Available online: <http://quanticfoundry.com/2016/07/21/social-gaming/> [Accessed 15 April 2022]

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? *Family Health International*, vol. 18, no. 1, pp. 59-82. Available online: <https://journals.sagepub.com/doi/abs/10.1177/1525822x05279903> [Accessed 15 April 2022]

Guo, Y. & Barnes, S. (2009). Virtual item purchase behavior in virtual worlds: an exploratory investigation. *Electronic Commerce Research*, vol 9, pp.77-96. Available online: <https://link.springer.com/article/10.1007/s10660-009-9032-6> [Accessed 26 May 2022]

Hawley, M. (2009). Laddering: A Research Interview Technique for Uncovering Core Values, *UX Matters*, Available online: <https://www.uxmatters.com/mt/archives/2009/07/laddering-a-research-interview-technique-for-uncovering-core-values.php> [Accessed 25 May 2022]

Hu, C., Kumar, S., Huang, J., & Ratnavelu, K . (2017) Disinhibition of negative true self for identity reconstructions in cyberspace: Advancing self-discrepancy theory for virtual setting. *PLoS ONE* vol. 12, no. 4, Available online: <https://doi.org/10.1371/journal.pone.0175623> [Accessed 15 April 2022]

Jackson, R., Drummond, D., Camara, S. (2007). What is qualitative research? *Qualitative Research Reports in Communication*, vol. 8, no. 1, pp. 21-28. Available online: <https://www.tandfonline.com/doi/full/10.1080/17459430701617879> [Accessed 15 April 2022]

Jones, C., Scholes, L., Johnson, D., Katsikitis, M., & Carras, M. C. (2014). Gaming well: Links between videogames and flourishing mental health. *Frontiers in psychology*, vol 5, no. 260. Available online: doi: 10.3389/fpsyg.2014.00260 [Accessed 25 May 2022]

Konstam, V. (2014). The Virtual Life Alongside: Technology and the Emerging and Young Adult, *Emerging and Young Adulthood: Multiple Perspectives, Diverse Narratives* pp. 51-64 [Accessed 6 May 2022]

Korstjens, I., & Moser, A. (2017) Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing, *European Journal of General Practice*, vol. 24, no. 1, pp. 120-124, Available online: doi: [10.1080/13814788.2017.1375092](https://doi.org/10.1080/13814788.2017.1375092) [Accessed 6 May 2022]

Levers, M. (2013). Philosophical paradigms, grounded theory, and perspectives on emergence. *Sage Open*, pp. 1-6. Available online: <https://journals.sagepub.com/doi/full/10.1177/2158244013517243> [Accessed 21 April, 2021]

Marder, B., Gattig, D., Collins, E., Pitt, L., Kietzmann, J., Erz, A. (2018). The Avatar's new clothes: Understanding why players purchase non-functional items in free-to-play game, *Science Direct*, Available online: <https://doi.org/10.1016/j.chb.2018.09.006> [Accessed 25 May 2022]

Marr, B., (2022). The Five Biggest Gaming Technology Trends In 2022, *Forbes*, Available online: <https://www.forbes.com/sites/bernardmarr/2022/02/28/the-five-biggest-gaming-technology-trends-in-2022/?sh=29b67f6c5fc7> [Accessed 5 May 2022]

Oliffe, J., Kelly, M., Gonzalez Montaner, G. & Yu Ko, W. (2021) Zoom Interviews: Benefits and Concessions, *Research Article*, vol. 20, Available online: <https://journals.sagepub.com/doi/full/10.1177/16094069211053522> [Accessed 10 May 2022]

Pringle, H. (2015). Conjuring the ideal self: an investigation of Self-Presentation in video game avatars. *Press Start*, vol. 2, no. 1. Available online: <http://press-start.gla.ac.uk/index.php/press-start/article/view/29> [Accessed 20 April 2022]

Ratan, R., & Dawson, M. (2016). When Mii is me: A psychophysiological examination of avatar self-relevance, *Communication Research*, vol. 43, no. 8, pp. 1065–1093. Available online: <https://doi.org/10.1177/0093650215570652> [Accessed 20 April 2022]

Rennstam, J., & Wästerfors, D. (2018). Analyze! Crafting your data in qualitative research. Studentlitteratur.

Sabbagh, M. (2015). The important differences between first-person and third-person games, *Game Developer*, Available online: <https://www.gamedeveloper.com/design/the-important-differences-between-first-person-and-third-person-games> [Accessed 10 May 2022]

Sevin, R., & DeCamp, W. (2020). Video Game genres and advancing quantitative video game research with the genre diversity score. *The Computer Games Journal*, vol. 9, pp. 401-420, Available online: <https://link.springer.com/article/10.1007/s40869-020-00115-3> [Accessed 9 May 2022]

Shi, J., Potenza, M. & Turner, N. (2020). The future of gaming disorder research and player protection: what role should the video gaming industry and researchers play? *International Journal of Mental Health and Addiction*, vol. 18, pp. 791-799. Available online: <https://link.springer.com/article/10.1007/s11469-019-00153-7> [Accessed 3 May 2022]

Stanford Encyclopedia of Philosophy (2020), Relativism, Available online: <https://plato.stanford.edu/entries/relativism/> [Accessed 7 May 2022]

Statista. (2021, a). Number of video gamers worldwide in 2021, by region. Available online: <https://www.statista.com/statistics/293304/number-video-gamers/#:~:text=Number%20of%20video%20gamers%20worldwide%202021%2C%20by%20region&text=In%202021%2C%20there%20were%20almost,billion%20gamers%20across%20the%20globe> [Accessed 10 May 2022]

Statista. (2021, b). Consumer spending on in-game purchases worldwide from 2021-2025. Available online: <https://www.statista.com/statistics/558952/in-game-consumer-spending-worldwide/#:~:text=In%202020%2C%20global%20gaming%20audiences,surpass%2074.4%20billion%20U.S.%20dollars> [Accessed 9 May 2022]

Statista. (2021, c). Distribution of video gamers in the United States from 2006 to 2021, by gender, Available online: <https://www.statista.com/statistics/232383/gender-split-of-us-computer-and-video-gamers/> [Accessed 2 May 2022]

Stavropoulos, V., Pinches, J., Morocos, M., Pontes, H. (2019). My Avatar, My Self, *Australian Psychology Society*, Available online: <https://psychology.org.au/for-members/publications/inpsych/2019/october/my-avatar,-my-self> [Accessed 25 May 2022]

Sublette, V. & Mullan, B. (2012). Consequences of play: A systematic review of the effects of online gaming. *International Journal of Mental Health and Addiction*, vol.10, pp.3-23. Available online: <https://link.springer.com/article/10.1007/s11469-010-9304-3> [Accessed 2 May 2022]

Turkle, S. (1997) *Life on the screen: identity in the age of the Internet*, New York: Simon & Schuster

Vogels, E. (2019). Millennials stand out for their technology use, but older generations also embrace digital life, Available online: <https://www.pewresearch.org/fact-tank/2019/09/09/us-generations-technology-use/> [Accessed 2 May 2022]

Wallace, K. (2008). Online anonymity, in Himma, K. & Tavani, H., *The Handbook of Information and Computer Ethics*, John Wiley & Sons, pp. 165-190.

Wang, L., Sun, Y., & Luo, X. (2022). Game affordance, gamer orientation, and in-game purchases: a hedonic-instrumental framework, *Information Systems Journal*, pp. 1-29. Available online: <https://onlinelibrary.wiley.com/doi/full/10.1111/isj.12384> [Accessed 2 April 2022]

Wang, J., Zhao, X. & Bamossy, B. (2009) The sacred and profane in online gaming: A netnographic enquiry of online gamers, *Virtual Social Identity and Consumer Behaviour*, pp. 109-124, Available online: [https://www.researchgate.net/publication/292018582\\_The\\_sacred\\_and\\_profane\\_in\\_online\\_gaming\\_A\\_netnographic\\_enquiry\\_of\\_online\\_gamers](https://www.researchgate.net/publication/292018582_The_sacred_and_profane_in_online_gaming_A_netnographic_enquiry_of_online_gamers) [Accessed 7 April 2022]

Wearing, S., Porter, P., Wearing, J. & McDonald, M. (2022) Exploring adolescent computer gaming as leisure experience and consumption: some insights on deviance and resistance, *Leisure Studies*, vol. 41, no. 1, pp. 28-41, Available online: <https://www.tandfonline.com/doi/full/10.1080/02614367.2021.1942525> [Accessed 7 April 2022]

Webb, S. (2001). Avatarculture: Narrative, power, and identity in virtual world environments. *Information, Communication & Society*, vol.4, no. 4, pp.560-594, Available online: <https://www.tandfonline.com/doi/abs/10.1080/13691180110097012> [Accessed 5 April 2022]

WePC. (2022). Video Game Industry Statistics, Trends, and Data in 2022. Available online: <https://www.wepc.com/news/video-game-statistics/> [Accessed 28 April 2022]

Williams, D. (2005). Bridging the methodological divide in game research, *Sage Journal*, Available online: <https://doi.org/10.1177/1046878105282275> [Accessed 5 May 2022]

Williams, D., Yee, N., Caplan, S. (2008). Who plays, how much, and why? Debunking the stereotypical gamer profile, *Journal of Computer Mediated Science*, vol. 13, no. 4, pp. 993-1018. Available online: <https://academic.oup.com/jcmc/article/13/4/993/4583542?login=true> [Accessed 16 May 2022]

Wolfendale, J. (2006). My avatar, my self: Virtual harm and attachment, *Ethics and Information Technology*, vol 111–119, Available online: <https://doi.org/10.1007/s10676-006-9125-z> [Accessed 5 April 2022]

Woodbury, R. (2021). Stay for Who You Can Be: Avatars in the Metaverse, *Digital Native*, Available online: <https://digitalnative.substack.com/p/stay-for-who-you-can-be-avatars-in?s=r> [Accessed 5 April 2022]

Yee, N., Bailenson, J. (2007). The Proteus Effect: The Effect of Transformed Self-Representation on Behavior, *Human Communication Research*, vol. 33, no. 3, pp. 271–290, Available online: <https://academic.oup.com/hcr/article/33/3/271/4210718> [Accessed 27 April 2022]

Yee, N., Bailenson, J. & Ducheneaut, N. (2009). The Proteus Effect Implications of Transformed Digital Self-Representation on Online and Offline Behavior, *Communication Research*, vol. 36, Available online: [https://www.researchgate.net/publication/228445790\\_The\\_Proteus\\_Effect\\_Implications\\_of\\_Transformed\\_Digital\\_Self-Representation\\_on\\_Online\\_and\\_Offline\\_Behavior/citations](https://www.researchgate.net/publication/228445790_The_Proteus_Effect_Implications_of_Transformed_Digital_Self-Representation_on_Online_and_Offline_Behavior/citations) [Accessed 28 April 2022]

Yokta, S. (2021). Balenciaga and Fortnite Team Up for a Digital-to-Physical Partnership, *Vogue*, Available online: <https://www.vogue.com/article/balenciaga-fortnite-partnership> [Accessed 28 April 2022]

# Appendix A: Third-person perspective in World of Warcraft



## Appendix B: First-person perspective in Call of Duty





# Appendix C: Character Options in Genshin Impact



# Appendix D: Avatar Customization in GTA 5



# Appendix E: Extract of the Interview Consent Form

## **About this study**

Our research goal is to understand the motivations behind in-game purchases. By studying and interviewing gamers, we are trying to reveal how avatars and in-game purchases help gamers with their self-expression.

We have asked you to participate as you are interested in gaming. This document is provided to help you understand the aims of our research, acknowledge your rights as a participant and ask for your informed consent to participate. The interviews will be a maximum of 45 minutes, and you will be asked to sign this document beforehand.

## **What will happen to your personal details?**

Your interview will be recorded via Zoom. It will then be transcribed from an audio recording into writing. The transcript will not be included in the final paper, but if the university or the participants are requested, we will provide it. We will not include your names in the final study or the transcripts and instead reference your interview using a fake alias. The transcribed interview will be coded and analyzed by the three researchers. If you wish to have a copy of your recorded interview or/and of the results of the study, please contact us.

The results of this research will be published in academic articles in scientific publications and a report published by the Lund University Student Papers.

## **Your Information, Your Choice**

Your participation is voluntary, so you are free to withdraw from the study at any time if you prefer to do so without any explanations or consequences. Also, if you feel uncomfortable answering questions or feel they are too personal, you can choose not to answer.

## **Potential Risks and Benefits**

Participation in this study should not expose you to any potential harm, risks, or burdens. However, you could potentially help contribute to scientific knowledge by helping us understand more about gaming and explore the connection between self-expression and avatars.

# Appendix F: Interview Guide

## *Gaming:*

- How often do you play online video games?
  - Do you identify as a gamer?
  - Why would you say you game?
- What are your favorite games and why?
- How would you identify yourself as a gamer? (Bartle's taxonomy)

## *Community:*

- Would you say there is a strong gaming community?
  - Would you say the community has evolved these past years?
- Have you made new friends online? Or do you play with some of your friends?
- Do you think there are rules and norms in gaming? If yes, how are they different from the ones in society?

## *Avatars:*

- What does your avatar look like? Why?
  - Does your avatar resemble you in real life?
  - Is your avatar different in every game?
  - Do you spend a lot of time customizing and creating your avatar?
  - Do you think girls spend more time customizing their avatar? Or perhaps it has nothing to do with gender?
- Would you say you have a certain emotional attachment to your avatar?
- Would you like to have the same avatar across all games?
- Do you think, as a gamer, you would get treated differently based on how your avatar looks? For example, do female avatars face similar stereotypes than in real life?
- Have you ever bought feminin skins/different skin colors etc?

## *Virtual Identity*

- Do you think you are different when gaming than you are in real life? For example, some people who were shy in reality were very chatty when gaming.
  - Why do you think you are different?
  - Do you act the same way with all gamers?
- Would you describe your avatar as a part of yourself or as a separate entity?

## *In-game purchases:*

- Do you make in-game purchases?
  - What type of content do you buy?
  - Do you know other people that make in-game purchases? Do you know why they do it?
  - What do you think of people that make in-game purchases?
  - Do you think the time spent on a game will incite you to make more in game purchases?
- Why do you make in-game purchases? Is it for status purposes/aesthetics/to boost your virtual identity?
  - Do you think other people have the same opinion as you on in-game purchases?
  - Would you say virtual goods are comparable to physical goods? What could you compare them to?

- Would you like your in-game content (skins, outfits, cosmetics) to be transferable to other games?
- What do you think about free customization options in games?
- Do you think buying a rare/expensive skin affects your status in the game? Would you say players are more respected if they have made more expensive in-game purchases?
- Would you like to own some of those skins/cosmetics in real life?