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Utilitarian and Self-Representational: Player-to-Player Character Relationships in Final Fantasy XIV

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UTILITARIAN AND SELF-REPRESENTATIONAL:
PLAYER-TO-PLAYER CHARACTER RELATIONSHIPS IN
FINAL FANTASY XIV

by

Zu Er Guan

Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Arts in Game Design
at
Lindenwood University

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UTILITARIAN AND SELF-REPRESENTATIONAL:
PLAYER-TO-PLAYER CHARACTER RELATIONSHIPS IN
FINAL FANTASY XIV

A Thesis Submitted to the Faculty of the College of Arts and Humanities
in Partial Fulfillment of the Requirements for the
Degree of Master Arts in Game Design
at
Lindenwood University

By

Zu Er Guan

Saint Charles, Missouri

December 13, 2024

ABSTRACT

Title of Thesis: UTILITARIAN AND SELF-REPRESENTATIONAL: PLAYER-TO-PLAYER CHARACTER RELATIONSHIPS IN FINAL FANTASY XIV

Zu Er Guan, Master of Arts in Game Design, 2024

Thesis Directed by: Prof. Jeremiah Ratican

This thesis studies the relationships between video game players and their player characters, the characters that they control, through the lens of player purpose and intent by conducting research using an online survey developed and analyzed using an interdisciplinary methodology based on existing studies in the field regarding avatar identification, player psychology, and queer and feminist theory. This thesis posits that there are two types of player relationships with their player characters based on player intent—player characters as the personal avatar and representation of the self, and player characters as a tool for the execution of player control and gameplay experience. This persists even in games where players are incentivized to view their player characters as avatars of the self rather than for utility alone such as Massively Multiplayer Online Roleplaying Games (MMORPGs) that often feature deep character customization and frame the player's character as central to the story or experience. This study was conducted on players of the game *Final Fantasy XIV (FFXIV)* by Square Enix, chosen for both its status as one of the most popular and active MMORPGs in the market and its game design philosophy that focuses on providing a good standalone RPG experience, thus especially centralizing the player character in both story and gameplay experience compared to most MMORPGs. The aim of this thesis is to study what factors influence player preferences or choices towards utilitarian and self-representational player-to-player character types of relationships within an environment such as an MMORPG in which players are heavily incentivized towards self-representation. Furthermore, this thesis aims to establish the utilitarian and self-representational type distinction based on player purpose towards player characters to further the field of study on player-to-player character relationships by providing the language and determination method for this previously unexplored angle of study on player values in their relationships with their player characters in MMORPGs.

Keywords: avatar identification, player purpose, self-representation, player psychology, MMORPGs

Acknowledgements

This study was only possible thanks to the guidance and support of many wonderful and talented individuals. The guidance of Prof. James Hutson was immensely helpful during the conceptualization and finalization stage of my research topic and specific research subject. I would also like to give thanks to Prof. Jeremiah Ratican for serving as my committee chair, and Prof. Ben Fulcher and Prof. Jeremy Carnes for being indispensable committee members that provided great insight and support with survey data handling, questions about scope, and discussion of existing scholarship.

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Introduction

In video games, the player character is the user's window into the game world, often serving as avatars of the players themselves through visual and thematic representation. Player characters also serve to invite the player to engage with the world as presented by the game with greater immersion, especially in games with a virtual society, such as those in the Massively Multiplayer Online Role-Playing Game (MMORPG) genre, where one's player character also represents them to fellow human players. However, not all players treat their player characters as direct forms of self-expression with strong levels of avatar identification. There are two types of player relationships with their player characters in terms of player purpose and avatar identification—player characters as the personal avatar and representation of the self (self-representational), and player characters as a tool for the execution of player control and gameplay experience (utilitarian). This persists even in games that heavily incentivize players to view their player characters as avatars of their selves, rather than as distinctly utilitarian, such as MMORPGs, which often feature in-depth character customization and frame the player characters as central to the story or experience alongside virtual societies and communities in a shared game world. *Final Fantasy XIV* by Square Enix (2010) is one such game, as a longstanding MMORPG that is currently one of the most popular and active games in the genre and is in direct competition in this genre with *World of Warcraft* (Blizzard Entertainment, 2004), possessing an incredibly large player base to draw from for future research. Additionally, compared to most MMORPGs, *Final Fantasy XIV* (Square Enix, 2010) has a heavier emphasis on player character-centric gameplay experience due to the design philosophy employed towards an immersive single-player roleplaying game experience as a priority, resulting in a strong focus on player character-centric narrative experiences. This study aims to further the understanding of

avatar identification and player-to-player character relationships in the field of game studies through investigating the utilitarian and self-representational types of player-to-player character relationships in *Final Fantasy XIV (FFXIV)* through an online survey developed and analyzed with an intersectional and interdisciplinary lens using theories and concepts stemming from psychology, queer theory, feminist theory, and game studies.

Literature Review

In this paper, the term “player character” is defined as the character through which the player engages with a game. The term “avatar” will be used to refer to the player character that represents the player themselves, regardless of customization or player choice, while the term “personal avatar” will refer to an avatar that the player uses for personal expression and representation of the self. All player characters are representations of the player (avatars), but not all player characters are personal avatars used or created for self-representation. Different elements and variables can contribute to player preference or disposition for different types of player-to-player character relationships, dynamics, and user-avatar bonds in games. Massively Multiplayer Online Roleplaying Games (MMORPGs) are a genre of games that often incentivize players to view their player characters as personal avatars, rather than distinctly utilitarian, by featuring deep character customization and framing the player characters as central to the story or experience. Despite this, both types of player-to-player character relationships persist in MMORPGs and similarly incentivized games. This literature review examines current peer-reviewed studies and journal articles in the field that similarly investigate the different factors that affect different kinds of user-avatar relationships and their effects on the players in games and online spaces.

User-Avatar Bond and Proteus Effect

“‘I am the character, the character is me’: A thematic analysis of the user-avatar relationship in Videogames” (Szolin et al., 2023) is a study that investigates and examines the bond that can develop between a player and their avatar—a user-avatar bond. Szolin et al. employ a qualitative methodology by conducting 12 semi-structured interviews structured on user-avatar bonds with gamers from the US and UK aged between 18 and 27 years before thematically

analyzing the resulting data through the lens of factors that can influence the relationship dynamics. The findings resulted in the identification of five major themes: heterogeneity of game worlds, avatar attachment, game experiences affecting physical world behavior and attitudes, types of self in a virtual world (with the sub-themes of “actual self”, “idealized self”, and “utopian self”), and game difficulty affecting user-avatar relationships (Szolin et al., 2023).

Notably, Szolin et al. define the avatar as something that is “not merely a means with which the gamer interacts with the virtual world in order to complete the in-game objectives, but [something that] can also take on a much more personal and important role for the gamer,” (Szolin et al., 2023) to the exclusion of utilitarian player characters (para. 2). They also discuss cases where a player differentiates themselves from their avatar (player character) and that it is then possible that the relationship dynamic shifts to one where the avatar is seen as a “social other” (para. 2), distinct from the self and thus leading to possible emotional intimacy with the character. This is the utilitarian player-to-player character relationship as described through the user-avatar bond that can form without the typical element of self-embodiment in personal avatars. Szolin et al. posit that this research on user-avatar connections indicates that regardless of player-to-player character relationship type, the characters can become “members of authentic human relationships” (para. 2). “I am the character, the character is me” also discusses the Proteus effect (PE), the phenomenon where players change their behaviors and attitudes to align more closely with the perceived characteristics of their avatar with effects observable even beyond the game world, through the lens of the user-avatar bond (Szolin et al., 2023). They posit in this study that PE is more likely to occur when a player has a greater degree of avatar identification and embodiment because of avatar customization. (Szolin et al., 2023, para. 8)

”Editorial: User-avatar bond: Risk and Opportunities in Gaming and Beyond” (Stavropoulos et al., 2022) is an article that investigates the user-avatar bond (UAB) by addressing the research topic using a collection of 14 studies focused on this notion of UAB. It serves as a literature review of the broad field of study of user-avatar relationships, rather than conducting a unique study on any specific element. The term UAB is used as an umbrella concept here concerning previous avatar-related research, such as the developed theoretical constructs for describing psychological user-avatar connections (Stavropoulos et al., 2022, para. 2). An overlapping concept within these constructs is that of embodiment as a facet of avatar identification (Van Looy et al., 2012, as cited in Stavropoulos et al., 2022), which they posit as a likely element contributing to the Proteus effect similar to the argument made by Szolin et al. (2023). Some of the studies examined showed that elements that influence players based on their avatar, such as the avatar’s perceived morals affecting players’ guilt responses, add to the suggestion that the interaction of player and avatar identity characteristics plays an important role in the Proteus effect (Stavropoulos et al., 2022, para. 5). The broader focus on the existing research topic of the UAB allows for conclusions to be drawn regarding more universal effects of avatars on players and vice versa, regardless of the type of player-to-player character relationship in terms of utility versus direct self-expression. As a result, their findings posit that the Proteus Effect occurs as a universal aspect of the core user-avatar bond, although a personal avatar relationship with a higher level of player-to-avatar characteristic congruency is more likely to trigger the PE due to higher degrees of embodiment and identification (Stavropoulos et al., 2022, para. 5).

“Avatar characteristics induce users’ behavioral conformity with small-to-medium effect sizes: A meta-analysis of the proteus effect” (Ratan et al., 2019) is a study that investigates

player-avatar relationships through the lens of how aspects of the avatar can influence the player's perception at varying degrees and discusses variables such as the gender identity (Beyea et al., 2019, as cited in Ratan et al., 2019) of the avatar on player identification, based on gender-consistency and gender-swapping. This research is based on investigating the reliability and size of the Proteus effect (PE) that posits that people conform in behavior and attitudes to their avatars' characteristics. This was done through a meta-analysis of the 46 qualitative experimental studies conducted where avatars with specific characteristics were randomly assigned to participants and observed. Overall, Ratan et al. concluded that the research indicates that PE is a reliable phenomenon with a small-but-approaching medium effect size, according to Cohen's rule of thumb (Cohen, 1992, as cited in Ratan et al., 2019), as the data showed behavioral and attitudinal measured outcomes in congruence with the level of variance predicted.

Avatar Diversity in Customization

“My Avatar and the affirmed self: Psychological and persuasive implications of avatar customization” (Kang & Kim, 2020) is a study that investigates the psychology of avatar customization and its effects on the persuasion and defensive processing of participants. The avatars are not specifically related to video games, but rather customizable avatars in themselves and studied for their effects on participants, as well as the implications of the findings for communicative purposes. The methodology used *Wonder World Creator*, a mobile application that lets users create and customize cartoon-like avatars in three lab experiments. Participants were gauged through questionnaires and qualitative essay-writing prompts about their experience. The participants were split between avatar customization and a matched control, with explicit distinctions between the usage of the word “avatar” when administering avatar customization with the encouragement of player self-representation, and the usage of the word

“character” in place of “avatar” in matched control groups that removed the encouragement of self-representation (Kang & Kim, 2020, p.10). This approach addresses the utilitarian player-to-player character relationship in the pursuit of creating control conditions which test if avatar customization can enhance persuasive effects through self-affirmation (Kang & Kim, 2020, p.13).

“‘It’s just part of me:’ Understanding avatar diversity and Self-presentation of People with Disabilities in Social Virtual Reality” (Zhang et al., 2022) is a study that aims to explore the avatar perception of people with disabilities (PWD) and preferences for disability disclosure in social Virtual Reality (VR). The methodology includes first a systematic review of 15 popular social VR applications to evaluate avatar diversity and accessibility support before employing in-depth interviews with 19 participants who had different disabilities (Zhang et al., 2022, section 3.1, para. 1). Avatar customization is a huge element examined in this study in relation to what variables and elements exist in PWD’s player-avatar relationships. This lends itself to the investigation of what happens when avatar customization is lacking in requisite diversity for the representation of core aspects of users, such as the thorough lack of avatar characteristics related to disabilities in social VR (Zhang et al., 2022, section 3.2.3). Findings show that most of the participants (17 out of 19) in Study II designed avatars to reflect their real-life physical appearances, including fashion, with eight participants (with deaf or hard of hearing and visual impairment disabilities) willing to disclose their disability by representing it through character customization options for their avatars (Zhang et al., 2022, section 4.2.2).

Self-discrepancy in Character Creation

“Me, myself, and not-I: Self-discrepancy type predicts avatar creation style” (Loewen et al., 2021) investigates the relationship between a player’s self-perceived discrepancies between their self, their aspired self, and the self they think they ought to be, guided by self-discrepancy theory (Higgins, 1987, as cited in Loewen et al., 2021). The methodology consists of an online study that screened participants based on previous experience with a Massively Multiplayer Online Game (MMOG). Loewen et al. (2021, section 2.2.1) measured the magnitude of participants’ self-discrepancies, and then employed an online survey assessing their preferred avatar creation style based on the three style descriptions of Realistic, Ideal, and Different. According to SDT, the self can be understood in terms of these three domains as “the *actual self* (the attributes that someone—self or other—perceives that the target person actually possesses); the *ideal self* (the attributes that someone wants the target person to possess), and the *ought self* (the attributes that someone believes that the target person should possess)” (Higgins, 1987, as cited in Loewen et al., 2021, section 1, para. 6). These three domains of the self are all ways in which a self-representational player-to-player-character relationship’s dynamic might form, be it a representation of the actual self, the character that they want to be thus representing the player’s valued characteristics, or the expression of the self that a player thinks that they should be, and thus of their way of thinking and accepted values. Though one of the style descriptions used is “Different,” (Loewen et al., 2021) it is used in reference to an avatar creation style “different” from the player’s perceived self, with the definition of avatars as self-representational, regardless of the type or domain of self being represented or expressed, as this study makes no mention of utilitarian type player-to-player character relationships and does not distinguish between the two types.

Investigation of avatar customization in relation to player and degrees of avatar identification was conducted through the assessment of participants' self-discrepancies, and thus, purpose during avatar customization and creation using the short version of Schwartz's Value Survey (SSVS) (Lindeman & Verkasalo, 2005, as cited in Loewen et al., 2021, section 2.2.2). Self-discrepancy and desire for the idealization of the self (or lack of it) are variables that were found to contribute towards the continued existence of both types of player-to-player character relationships in MMOGs. More specifically, Loewen et al., found that the perceived values discrepancy between the actual and ideal self were, on average, higher among those who preferred idealized avatars compared to those who preferred realistic avatars, while those who preferred completely different avatars (distinct from self) averaged higher on perceived values discrepancy between actual and ought self than players that preferred realistic avatars. Those that prefer different avatars also averaged higher in actual-ought discrepancy values, compared to those who preferred idealized avatars (Loewen et al., 2021, section 4).

“Gaming disorder: A systematic review exploring the user-avatar relationship in Videogames” (Szolin et al., 2022) is a systematic literature review that aims to explore virtual world avatars and the dynamics of the user-avatar relationship in the context of Gaming Disorder (GD) using the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) guidelines on a collection of 15 peer-reviewed studies. GD is, in essence, an addiction to gaming, but is specifically defined according to the World Health Organization (WHO) as “impaired control over gaming behaviour that takes precedence over other life activities and continues or escalates despite occurrence of negative consequences, and causes significant impairment to social, occupational, personal or other area of functioning” (World Health Organization, 2018, as cited in Szolin et al., 2022, para. 4). This paper discusses player self-discrepancy and the

utilization of avatars to resemble their idealized selves as a form of self-expression and representation and the relationship with GD. The ten studies included in this review relating to avatar identification were found to consistently demonstrate an association between high GD and high avatar identification using different methods of assessment (Burleigh et al., 2018; Liew et al., 2018; Lopez-Fernandez et al., 2019; Mancini et al., 2019; Müller & Bonnaire, 2021; Sioni et al., 2017; Smahel et al., 2008; Stavropoulos et al., 2020; You et al., 2017; Zhong & Yao, 2013, as cited in Szolin et al., 2022). Szolin et al. posit that this indicates that “the avatar is something substantially more personal than simply a means for a player to complete in-game goals and objectives or a vehicle with which to navigate a virtual environment” and may be seen as a “virtual world extension of the player’s identity” (Szolin et al., 2022, p. 24). The results of this meta-analysis serve as confirmation of the existence of the personal avatar player-to-player character relationship type distinct from that of utilitarian purpose and the definition of “avatar” as distinct from the “player character” alone. This substantially supports the definition of “avatar” as associated with representation of the player’s personal self and thus the existence of self-representational player-to-player character relationships, alongside the existence of utilitarian player-to-player character relationships wherein a player character is “simply a means for a player to” (Szolin et al., 2022) engage with the game.

“Avatar identification and problematic gaming: The role of self-concept clarity” (Green et al., 2021) identified that customizable avatars could enable users to fulfill self-identity needs, and that research suggests that problematic gaming—also known as Gaming Disorder (GD) or video game addiction—is associated with poorer self-concept and stronger avatar identification. As such, the researchers investigated the relationship between avatar identification and avatar characteristics and game types based on the latter’s potential influence on the former. Further,

their research question lies in whether the association between avatar identification and problem gaming was mediated by self-concept clarity. The methodology used was an online survey administered to 993 participants. This study investigates variables that contribute to a player's relationship with their player character as an avatar based on avatar identification and thus embodiment, self-concept clarity, and their potential impact on problematic gaming. Findings showed that avatar identification scores did not differ greatly according to avatar features or game type, but that avatar identification was related to higher scores for problem gaming and poorer self-concept clarity while wishful identification (idealized self) was the only significant predictor of problem gaming (Green et al., 2021, section 4). Research shows that the most important aspect of avatar identification in relation to problem gaming, however, is the ability of the avatar to provide means of compensation for the player's perceived deficiencies in their actual self in the real world.

Self-identity Exploration – Trans and Gender-Diverse Players

“Choice-based games and Resilience Building of gender nonconforming individuals: A phenomenological study” (Cantrell & Zhu, 2022) is a study that explores how the game-playing experiences with choice-based games of gender nonconforming (GNC) people help them shape their gender identities and gain resilience. The researchers conducted in-depth interviews with twelve GNC people to collect qualitative data and interpreted using qualitative analysis by using themes to identify meaning in the interview responses. This study is phenomenological, similar to the persistent existence of the two player-to-player character relationship types in MMOs with player-personal avatar incentives. The findings showed that six common themes were identified within their population's gaming experiences: 1) character creation: exploring gender identity through an avatar; 2) self-exploration and experimentation in games; 3)

resonating experiences; 4) positive inclusive features in games; 5) storytelling and involving the player and 6) your actions have meaning (Cantrell & Zhu, 2022, p.205).

“The Role of the Avatar in Gaming for Trans and Gender Diverse Young People” (Morgan et al., 2020) examines the role and effects of the customizable avatar in gaming on young (M = 16.3 years) trans and gender-diverse (TGD) people through in-depth interviews and uses a general inductive approach towards thematically analyzing the transcribed data. The participants in this study provide testimonies regarding their personal relationship to avatars and the research shows that similar to the findings from “Choice-based games and Resilience Building” (Cantrell & Zhu, 2022), character customization is crucial for reflecting greater gender diversity and thus facilitating greater potential for avatar identification and fulfillment of this player-to-player character relationship. This study’s participants are a strong demographic of players that have a player-avatar relationship of personal expression in games.

“From battleground to playground: The video game avatar as transitional phenomenon for a transgender patient” (Rivera, 2022) uses both the language and theories of Winnicott (1953, 1965, & 1971, as cited in Rivera, 2022) and the case study of Cynthia, a trans woman who used her video game avatar as a therapeutic and exploratory tool during her medical transition, to examine and exemplify the positive aspects and values of the video game avatar as its role in transgender players’ transitional experiences through their avatars. The case study involved discussion and usage of a game from *The Sims* (Electronic Arts) series. This article aims to combat the negative preconceptions regarding avatars in the video game space as detrimental to players, typically without consideration for trans and gender nonconforming (TGNC) players. This is a qualitative study that investigates one type of player-avatar relationship specific to transgender players and the possible components that contribute to the way avatars are used and

affect their players. Rivera found that virtual spaces can be considered a therapeutic tool, and avatars within virtual spaces can be considered as a tool for transitional phenomena and exploration by TGNC players.

Player Identity – Gender as Deterrent to Avatar Identification

Self-identifying as a marginalized gender, such as women, is stigmatized and runs the risk of discrimination and harassment even when the game allows for player-consistent avatar customization. “Becoming a Gamer: Performative Construction of gendered gamer identities” (Kivijärvi & Katila, 2021) studies the ways in which women construct their gameplay identities in relation to the hegemonic and masculine gamer discourse. This article examines existing research on social identity and women in games, notably based on the qualitative data of semi-structured in-depth interviews and Judith Butler’s theorization of performative identity construction. Kivijärvi & Katila's findings suggest that “women’s subjectification and participation in gaming spaces as well gaming industry necessitates the mastery of, and submission to the dominant gamer discourse.”

“To be or not to be a female gamer: A qualitative exploration of female gamer identity” (Kuss et al., 2022) is a study that addresses the gender gap in the field of study on online gaming by interviewing twenty female adult gamers across Europe. Kuss et al. identified four main themes in their relationship to online gaming: (i) to be or not to be a (female) gamer; (ii) improving social skills and mental health; (iii) gaming is not always a healthy escape; and (iv) there is more to explore in female gamer identity. Like Kivijärvi & Katila’s “Becoming a Gamer,” this study explores and discusses sexism in the predominantly male hegemonic gamer discourse while addressing the stigmatization of female gamers as deterrents to female players

identifying as their gender in online games for fear of gender violence, discrimination, harassment, and objectification. This is one of the anticipated contributing variables to the phenomenon of utilitarian player-to-player character relationships distinct from the player's self in relation to gender incongruence in the context of MMORGs.

Player Preference, Typology, and Final Fantasy XIV

“Avatar capital: The relationships between player orientation and their avatar's social, symbolic, economic and Cultural Capital” (Korkeila & Hamari, 2020) is a study that employed an online survey of 905 players of the MMORPG *Final Fantasy XIV* (Square Enix, 2013) to investigate the relationship between the traits related to gaming preferences (player orientation, a.k.a. player purpose) and forms of avatar capital. The forms of avatar capital assessed include social, economic, cultural, and symbolic capital, with all forms of capital tied to the player's personal gaming preferences. As an MMORPG, *Final Fantasy XIV* features deep character customization and player-centric experiences through both story and gameplay, greatly incentivizing player-to-personal avatar relationships by design. The results of Korkeila and Hamari's findings suggest that players' orientation towards achievement mechanics, immersion, and social aspects of games are associated with the avatar's cultural capital, with achievement and relationship parts of the game associated with the avatar's economic capital. Additionally, a player's preference towards immersion, in-game interests, and the social parts of *Final Fantasy XIV* are associated with social capital, while the symbolic capital of an avatar is associated with achievement, social orientations (relationships and teamwork), and the length of the player's play history with the game (Korkeila & Hamari, 2022, p.21-22). Analysis of the quantitative data results involved usage and reference to Cohen's rule of thumb (Cohen, 1996, as cited in Korkeila & Hamari, 2022). Korkeila and Hamari do not make a distinction between self-representational

and utilitarian and appear to use the term “avatar” to refer to player characters without any particular inclination towards either type of player-to-player character relationship. The findings of this study indicate that different player preferences towards different features and types of content in *Final Fantasy XIV* result in tangible differences in capital as accumulated by and visible through the avatar, and thus informs the possibility of a connection between avatar (player character) capital and either type of player-to-player character relationship, which is determined largely by player purpose of either intentionally self-representative or detached from the self for engagement with the game.

Similarly, Wang et al. studies player experiences in MMORPGs through Bartle’s player classifications (Bartle, 1996, as cited in Wang et al., 2021) as related to the quest systems of *Final Fantasy XIV* in “MMORPG Evolution Analysis from Explorer and Achiever Perspectives: A Case Study Using the Final Fantasy Series” (Wang et al., 2021). More specifically, they analyze the quest systems while considering explorer and achiever-type players using both the game refinement (GR) theory and the concept of motion in mind as their primary research methods, both of which reference concepts from physics. GR theory involves an exponential mathematical model of game information progress that posits that the acceleration of uncertainty of a game’s outcome positively corresponds to emotional impact on players or observers’ such as their level of entertainment or engagement and proposes the derived value of this model as a measurement of game refinement (Purwarianti & Iida, 2014, as cited in Wang et al., 2021). The concept of motion in mind essentially posits that all that is in progress is in motion, and thus both the game progress and the game information progression as received and parsed within the human mind are considered in motion, especially in conjunction with the other comparisons that Wang et al. draw between game elements and physics concepts, such as solved

uncertainty/displacement, winning rate/velocity, winning hardness/mass, and potential energy of game/gravitational potential energy (Wang et al., 2021, p. 7). Notably, Hiroyuki Iida is one of the researchers that is also thoroughly cited throughout this study as the coauthor of the original work that proposed the game refinement theory in 2014 (Purwarianti & Iida, 2014, as cited in Wang et al., 2021) as well as being a part of many other publications on the GR theory as used in application to various games.

Wang et al.'s goal with this research was to find potential solutions for alleviating the game design problem of quest system "bloating", where in the attempt to create new content to raise engagement of current players and attract new players, quests become too numerous to the point of decreased quality while increasing game time to an overall decrease in game refinement value. To resolve the difficulty of balancing the creation of new content, Wang et al. sought to derive an ideal balance to serve as a goal for game designers and guide their quest system design to avoid bloat while increasing engagement and available game content for players to experience. Similarly to this thesis on player-player character relationships in *Final Fantasy XIV*, Wang et al. analyzed and discussed *Final Fantasy XIV* in terms of player purpose in relation to player experience as accrued or induced by the game environment—though Wang et al. specifically studies the quest system through the informational science lens of GR theory and motion in mind rather than through psychology, feminism, and queer theory as related to the player's personal identity. Wang et al. also did not consider the player character in their study of the player experience though they consider player classifications in analysis and discussion, and are more interested in investigating the game-to-player relationship in terms of quest systems as what they have identified is the main form of gameplay progress due to being the structure that functions simultaneously as the provider for player direction and objective, content itself, and reward

distribution. Additionally, the main quest system in *Final Fantasy XIV*, like many MMORPGs, is tied to the level system which also functions conveniently as an arbitrary measurement of player progress through both predefined “experience point” requirements for each level and quests being locked by both level and quest progress. Wang et al. found that *Final Fantasy XIV*, through its balance and consistent timeline, development, and release cycle of “special quests” which are distinct from the main quests and regular quests and provide new types of unlockable content with rewards that suit diverse player types, fell consistently within the GR zone which indicated the optimal area of player excitement and engagement according to the GR theory. Particularly, Wang et al. found that *Final Fantasy XIV* provided sufficient acceleration through ease of “catching up” to the newest content alongside a high ratio of special quests to main or regular quests, and they encourage MMORPG designers in general to follow suit, taking note of the way *Final Fantasy XIV* times their quests, level progression, and diversity of player experience that caters to different player types across explorers and achievers in particular.

State of Topic in The Field

The overall acknowledgment seems to be that the player-to-player character relationship wherein player characters are non-representative of the player’s self (actual, ideal, or otherwise) is rare or secondary to the more commonly observed and studied player-personal avatar relationships of heightened avatar identification and embodiment, both with and without avatar customization. The Proteus Effect has been found to be reliably effective with a small-to-medium effect size through various qualitative studies (Szolin et al., 2023, Stavropoulos et al., 2022, & Ratan et al., 2019) and observed to be interactive with avatar identification and problematic gaming, also known as Gaming Disorder (GD) (Green et al., 2021 & Szolin et al., 2022). Avatar identification and embodiment are topics investigated in almost all the studies and

articles examined and show a common link found between degrees of avatar identification and avatar characteristics congruent with player identity, especially in player-personal avatar relationships of self-representation (Szolin et al., 2023, Stavropoulos et al., 2022, Ratan et al., 2019, Loewen et al., 2021, Green et al., 2021, Cantrell & Zhu, 2022, & Rivera 2022). Self-discrepancy and self-concept clarity have been found to be large influences on the different player-to-player character relationships as chosen by players, most observed as incentives for utilizing player characters as personal avatars for representation of the self. Gender is a strong factor in motivating players for both types of player-to-player character relationships, due to both the hegemonic and predominantly masculine nature of gaming and the exploratory and therapeutic potential of avatars for marginalized genders (Kivijärvi & Katila, 2021, Kuss et al., 2022, Cantrell & Zhu, 2022, & Rivera 2022). Qualitative approaches to research and analysis are popular, the most common methodologies being in-depth interviews (semi-structured and structured) and online surveys.

Conclusion

Although there is a lack of research on the specific phenomenon of the two types of player-to-player character relationships based on utility versus self-representation, there are many studies on user-avatar bonds and player-personal avatar relationships. Research seems to support a positive relationship between avatar identification and avatar characteristics' congruency with player identity. Additionally, the same elements that factor into player attraction towards relationships with their player characters as personal avatars are also observed, although differently and to a lesser extent, to be possible contributors to attraction to player relationships with their player characters as entirely distinct characters from the self. More

research is needed to consider player-to-player character relationships without intentional representation of the player's self and the phenomenon of its continued existence in MMORPGs.

Methodology

In the investigation of the continued existence of both types of relationships in this given setting using *Final Fantasy XIV*, the following methodologies were used to identify possible factors of influence as applied to players and player-to-player character relationships: psychology, queer theory, and feminism. Research into these methodologies and their existing literature related to various aspects of player-to-player character relationships and avatar identification was used to guide the development of the main survey instrument for this study—a non-identifying online survey administered using Qualtrics to voluntary participants recruited through online communities, primarily through the r/FFXIV forum on the Reddit website. This is also the research methodology through which the data is analyzed and considered, as well as part of the foundation upon which the conclusions are drawn with the limitations of this study, as conducted, in mind.

In this study, the term “player-to-player character relationship” is used to refer to a player’s relationship with their player character, identified as either utilitarian or as self-representation according to player intent. Although some players may experience parts of both types of relationships, they still fall under one primary type of relationship as either utilitarian or self-representation. As a player spends more time in a game with their player character, it is possible that their player-to-player character relationship might change. The term “player character” is used to refer to the representation of the player’s existence, regardless of player intent to represent themselves as an expression of their identity, or as a mere tool for engaging with the game. In the context of *Final Fantasy XIV*, the player character is a humanoid being referred to as a “Warrior of Light” that can be one of eight races, which have no restrictions on gender or class choice. The term “avatar” will be used to refer to the player character, regardless

of player intent, while the term “personal avatar” will be used to refer to an avatar that the player uses for personal expression and self-representation. Put simply, avatar will be understood as synonymous with player character despite the common attribution of all avatars as personal avatars to any given player.

Psychology – Player Identity & Orientation

Psychology as a methodology in game studies has been most frequently used to study gaming addictions and to investigate the subconscious effects that content in video games can have on players. Many studies often involve avatar identification and investigate this in the lens of the psychology of the player and tendencies towards problematic gaming. Although player identity is used to refer to the identity of the player outside of the game world, players’ identities as players within the context of gamic interaction and engagement cannot be disregarded. Scholars Henry Korkeila and Juho Hamari investigate using this gamic lens in their study, “Avatar capital: The relationships between player orientation and their avatar’s social, symbolic, economic and cultural capital”, where they conducted research through an online survey to *Final Fantasy XIV* players in the study of the relationship between the traits related to gaming preferences (player orientation) and forms of capital possessed by their avatars (Korkeila & Hamari, 2020). Results indicate that players’ gaming preferences, also known as player purpose or player intent towards a game, do in fact affect their avatar’s accumulated capital in-game. Korkeila & Hamari refer to all player characters as avatars of the player without distinction between the types of player-to-player character relationships and do not take into consideration the degree of avatar identification or player intent for their avatar as representation of the self or as a separate entity and identity to be used for engagement with the game. Rather than avatar identification, they focus instead on the avatar within the game world and its accumulation of

capital in relation to player orientation and gaming preferences. The results support the argument that one's player character functions as an expression of the player's desires and a tool for engagement with the game in their preferred content.

Further, player orientation may influence how players create and customize their avatars, as socially inclined players may prefer to create a self-representational personal avatar as they engage in conversation and express their personal opinions and stories outside of the game, or otherwise express their preferences and inclinations through engaging in roleplay (Korkeila & Hamari, 2020). At the same time, players with a preference for roleplaying may create player characters divorced from their actual self, instead playing as an original character with their own fictional backstory with which to engage in the game world. In *Final Fantasy XIV*, the developers and writers invested greatly in lore and worldbuilding, leading to race descriptions in character customization that evoke unique cultures for each fictional race, which may incentivize players to create immersive characters for both utilitarian and self-representational purposes. A common feature in MMORPGs with multiple races are race-exclusive bonuses, often in the form of direct numerical attributes (stats) or unique skills that affect power and efficiency in combat gameplay. In *Final Fantasy XIV*, each race has unique starting attributes (stats) but due to the actual scale of stats, the incredibly minor differences of at maximum, six points in any given attribute compared to another race, are insignificant in impact on gameplay experience. However, ignorant combat-oriented players may opt to choose the race of their player character based on the starting attributes that align best with their desired class in-game due to their preference for combat over aesthetics or representation of the self. These race-based motivations are a potential influential factor on the persistence of utilitarian player-to-player character relationships in *Final Fantasy XIV* and MMORPGs with similar features. Player orientation

should be taken into consideration alongside a player's selection or preference for any given race for their player characters.

Psychology – Avatar Identification, Self-concept Clarity, & Escapism

Player orientation is, in essence, expectation or intent toward the video game and game world as opposed to reality. A defining keystone of the MMORPG genre is its virtual societies, and player intent when engaging with a game affects how they approach their player character as the representation of their existence in-game to other players beyond merely the designed and developed content and systems of the game itself. A common motivator that draws people to video games and defines their intent towards a game is escapism, much like other mediums of fiction, though video games allow for much more immersion due to the necessity of player interaction as an active participant in the experience, and the possibility for nonlinear experiences compared to novels or film. Escapism refers to the act of engaging in fiction or fantasy as a means of escaping reality, and in the case of video games, the act of playing games to immerse oneself in the game world to detach from or forget about the real world. In *Escaping through video games: Using your avatar to find meaning in life* (Fraser et al., 2023), a research journal by Rosalynd Fraser, Jan Slattery, and Igor Yakovenko, Fraser et al. examined the role of escapism and avatar identification—that is, the way a player identifies with their avatar (Müller & Bonnaire, 2021)—as “potential mediators of the relationship between meaning in life and gaming disorder risk,” and if gaming genre preferences of a player would affect this mediating effect if so (Fraser et al., 2023). They used these parameters of the presence of meaning (PM) and the search for meaning (SM) as predictors for the likelihood or risk of disordered gaming also known as gaming addiction or Gaming Disorder (GD) (Fraser et al., 2023). The results of their study and analysis supported their hypothesis that lower PM and higher SM led to a higher

risk of Gaming Disorder. Specifically, escapism and avatar identification were identified as “serially mediating the relationship between higher SM and disordered gaming,” while only avatar identification mediated the relationship between higher PM and disordered gaming. (Fraser et al., 2023) Notably, genre preference did not show any moderative effects of escapism on avatar identification. (Fraser et al., 2023)

Similar to Fraser et al.’s examination of escapism through the usage of personal avatars that players live vicariously through, Raquel Green, Paul H. Delfabbro, and Daniel L. King investigated the relationship between avatar identification, problematic (or disordered) gaming, and if this was mediated by self-concept clarity in *Avatar identification and problematic gaming: The role of self-concept clarity*. (Green et al., 2021) They approached this investigation through an online survey containing questions about avatar features and game type that was then administered to 993 participants. (Green et al., 2021) They found that the degree of avatar identification did not differ greatly according to avatar features or game type, but avatar identification was indeed related to higher scores for problematic gaming and poorer self-concept clarity. Notably, they found that the only significant predictor of problem gaming was wishful identification, also known as players’ self-representation of their idealized selves through their personal avatar. (Green et al., 2021)

Me, myself, and not-I: Self-discrepancy type predicts avatar creation style (Loewen et al., 2021) dives into this relationship between idealized self, their real self, and the self that they think they should be according to external motivators using the self-discrepancy theory that describes the self as able to be understood in terms of these three domains. (Loewen et al., 2021) These are, more specifically, “the actual self” which are the attributes that someone—self or other—perceives that the target person actually possesses, the “ideal self”, which are the

attributes that someone wants the target person to possess, and the “ought self”, the attributes that someone believes that the target person should possess. (Higgins, 1987, as cited in Loewen et al., 2021). Loewen et al., measured the magnitude of participants’ self-discrepancies and assessed their preferred avatar creation styles based on their three style categories of Realistic, Ideal, and Different. Loewen et al.’s findings suggest that various levels of self-discrepancy according to the three domains correspond to player preference for completely different avatars (distinct from self and more likely utilitarian), realistic (true to self and self-representational), and ideal avatars (idealized self, also self-representational). This supports the hypothesis that player intent and self-concept clarity affect the nature and type of player-to-player character relationships and should be considered anticipated influential factors.

Further, a review was conducted in *Gaming disorder: A systematic review exploring the user-avatar relationship in Videogames* by Kim Szolin, Daria Kuss, Filip Nuyens, and Mark Griffiths (Szolin et al., 2022) on ten studies related to avatar identification and they found that despite using different methods of assessment, these studies altogether consistently demonstrated an association between high levels of Gaming Disorder and high levels of avatar identification. Altogether, it can be posited that players that are addicted to gaming or are passionate about experiencing escapism may be more likely to have a personal avatar.

Queer Theory – Gender Identity & Gender Expression

Queer Theory is the critical examination of heteronormativity, gender oppression, and social identity related to gender and sexuality, applicable to all fields and times. In game design and game studies, queer theory is often used to inspect how queerness—that is, the experience of being non-cisgender or non-heterosexual—is expressed and enabled or suppressed by gamic

systems and design. Gender is an incredibly important aspect of many people's lives and identities, as it significantly influences how most people treat one another based on perceived gender and is an important aspect of many people's romantic and sexual attraction towards others.

Queer theory inform the terms and definitions of gender identity, gender expression, and assigned sex—the categorization of male, female, or intersex based on one's chromosomes and reproductive organs—are distinct from one another although intertwined. Gender is often equated with sex, and thus both are assigned to a person at birth. One's gender identity is affected by sex due to social upbringings imposed on people differing based on their assigned gender at birth attributed to sex, but it is not determined by sex. One may identify as a certain gender (gender identity), for example male or female, without necessarily expressing themselves or their gender in alignment with the social expectations and attributions of masculinity or femininity to certain things (gender expression). The term cisgender is used to refer to an individual whose gender identity aligns with their assigned sex, for example a man that was assigned male at birth. The term transgender is used to refer to an individual whose gender identity does not align with their assigned sex, for example a man that was assigned female at birth. Nonbinary refers to those whose gender identities do not fall neatly within either gender of the binary of male or female and is often used as an umbrella term for individuals that are, for example, genderfluid or agender. The term gender nonconforming simply refers to individuals who do not conform to binary expectations of gender expression and performance, not mutually exclusive with transgender or nonbinary.

In game design and game studies, queer theory is often used to inspect how queerness—that is, non-cisgender and non-heterosexual—is expressed and enabled or suppressed by gamific

systems and design. Gender identity and gender expression, pervasive as they are in both everyday life and in one's self-identity, naturally plays a large role in how a player will approach the selection or creation and customization of their player character in any given game. For individuals of marginalized genders such as transgender, nonbinary, and female players, customizable avatars in video games provide a chance to embody or express their gender in a largely male-dominated medium and industry and further, in an oppressive society both within the game world and within reality. Many transgender players use avatars of their gender as idealized versions or fantasies of their ideal self, rather than their ought self (Loewen et al., 2021), in alignment with their gender expression in a way that may be impossible or difficult to realize outside of a game world (Cantrell & Zhu, 2022). The act of creating a personal avatar that reflects their idealized gender expression for their control and use is a method that allows players to represent and embody their ideal self in a deeply immersive way. This gender expression-based motivation is thus an anticipated factor of influence on the likelihood of player-to-player character relationships of self-representation. This is supported by both the studies *The Role of the Avatar in Gaming for Trans and Gender Diverse Young People* (Morgan et al., 2020) and *Choice-based games and Resilience Building* (Cantrell & Zhu, 2022) which share similar findings that show character customization is a crucial component for reflecting greater gender diversity and thus facilitates greater potential for stronger avatar identification. The participants of both studies were transgender and gender nonconforming players.

Crucially, embodying an avatar with a gender identity and expression that aligns with a player allows them to experience a world where their gender is acknowledged and recognized by the (game) world, which for most non cisgendered players is in stark contrast to reality outside of the game and is thus a medium ripe for escapism. Using and creating personal avatars that

represent them in this way has shown to frequently be a deeply therapeutic experience for transgender, nonbinary, and gender nonconforming players whose gender identities are recognized by the games they play, as not all games are inclusive of genders aside from male and female. The identification of the player character as attributed to the player results in gender euphoria for many. “From battleground to playground: The video game avatar as transitional phenomenon for a transgender patient” by Sien Rivera is a study on the effects of transgender players’ personal avatars in video games, and in it, Rivera found that virtual spaces, such as those in MMORPGs, can be considered a therapeutic tool for “transitional phenomena and exploration” by transgender and gender nonconforming players (Rivera, 2022). Further, gender exploration is a viable motivator for players to create a personal avatar with a different gender identity and expression than the player themselves, as their player character and by extension themselves interacts with the game world and other players through a gender expression different from what is familiar to the player first-hand. Players are thus able to use player characters to explore gender expression (self-representation) by both figuratively and literally trying on different clothes—as gear in MMORPGs are often gender-locked, and in *Final Fantasy XIV* most gear have different appearances based on gender—to see how they feel without larger social backlash connected to their real identities—challenging the Ought self through manifesting a Different self (Loewen et al., 2021)—through the usage of anonymity in an online space.

Queer Theory – Gender-based Restrictions in Character Customization

Despite the potential for gender exploration through character customization in games, particularly MMORPGs with their virtual societies and social engagement, most games including *Final Fantasy XIV* do not allow for non-cisgendered player character customization. In *FFXIV*,

body types are locked to gender and race, and the player character is canonically considered cisgender. Some races have strong sexual dimorphism, like Au Ra whose men are significantly taller and have broad shoulders, small waists, and very different face shapes from the women of short and thin stature. A transgender or nonbinary player wishing to play as a character that is similarly assigned male or female at birth will be faced with misgendering by the game system as it only recognizes player characters as one gender for either sex without the choice for custom gender attribution such as pronouns. This may motivate transgender, nonbinary, gender nonconforming, or gender-questioning players in particular to form or create a utilitarian relationship with their player character due to difficulty with avatar identification, as studies show that they strongly prefer creating or using PCs similar to their own gender for the purpose of gender identity exploration and expression (Morgan et al., 2020; Cantrell & Zhu, 2022; Rivera, 2022). Additionally, there are cosmetic features such as in-game animations that are unique to each race and gender of each race, which can incentivize players to create characters different from themselves and potentially hinder avatar identification based on the aesthetics of each set of animations. For example, a popular race and gender-restricted animation is the “Joy” emote as performed by male PCs of the cat-like Miqo'te race, which features animated movement of their ears and tails. Female Miqo'te emote animations possess a marked lack of similar usage and movement of their ears and tails in comparison. Another type of animation that is restricted by gender are the class idle animations, where female and male player characters stand in slightly different poses while idling, often with insignificant attribution of potentially feminine or masculine characteristics. There is a continued demand amongst players in Final Fantasy XIV for the lifting of the gender restrictions on class and race animations, as many of the class animations and poses are commonly perceived as gender neutral.

Feminism – Gender-based Discrimination

Feminism and feminist theory critically examine gender inequality and deconstruct systems of gender-based discrimination in hegemonic and patriarchal (male-dominated) societies. In game studies, feminism is most often applied to the discriminatory treatment of women and female characters by both game designers and fellow players. Historically, game culture and the game industry were male-dominated, and many discriminatory and destructive traits remain today. Feminist theory seeks to identify these issues as the first step to remedying them. Social discrimination based on gender expression is prevalent in multiplayer games due to the influence of masculine hegemonic gaming culture, with players perceived to be female often either harassed or treated differently based on misogynistic assumptions such as lack of gaming skill or knowledge or holding an agenda of invasion into a field that “belongs to men” as a result of being a hobby that was historically male-dominated despite the ever-rising demographic of female players across video game genres. (Kivijärvi & Katila, 2021)

Female characters in video games are also historically sexualized, and this sexualization in character design persists to different degrees across different games. When it comes to MMORPGs, however, the female player characters themselves are also often sexualized with the intent of catering to the male player demographic. As a result, while some male players play as female player characters to sexualize them as distinct from themselves in a utilitarian manner, some female players might choose to play as male player characters to avoid being sexualized and objectified (Kuss et al., 2022) by both the game and the other players that perceive their avatar that, depending on the game and customization options available, might be unavoidably sexualized in appearance or animation. At the same time, though, some female players may choose to play as and intentionally sexualize their female player character for the actualization of

either the ought self (society's perception of an attractive woman) or the idealized self (embodied desires and wish fulfillment). Alternatively, they may also be attracted to women and might play as a sexualized female player character divorced from the player's self-identity, similar to how heterosexual male players might.

Female protagonists in games and general media are underrepresented, and player characters, notably those in MMORPGs, are a chance for players to induce representation. Avatars in MMORPGs, despite any sexualization in character design, are often treated in-world and in-plot as gender neutral, as they are in *FFXIV. Final Fantasy XIV* accounts for the fact that the player's gender and their player character's gender are not necessarily one or the other and thus have a notable lack of gender-based or gender-discriminate content in narrative and in gameplay despite the aesthetic gender-based restrictions imposed on gear, appearances, and some animations. This allows for players to play as a typical female protagonist written without bias or assumption of the player being male. *FFXIV* is a story-heavy game that centers the player character and allows for self-representation in this way. Additionally, some players may not be female and simply seek representation for an underrepresented group they are not a part of for more diverse and novel stories and experiences.

Miscellaneous Considerations

Another possible factor to be taken into consideration from outside of these three methodologies is the lack of representation for physical disabilities in both video games as a whole and in *Final Fantasy XIV*. Very few games include representation of physical disabilities such as the usage of mobility devices like wheelchairs and canes. Visual aids like glasses are far more common, but still often treated as a fashion item that is later acquired rather than a

disability aid that would also be realistically with the player character from the start. As the alignment of an avatar's traits positively affects the degree of avatar identification by a player, this might be a deterrent to players forming self-representational relationships with their avatar.

Additionally, some utilitarian players choose the gender and race of their player character based mainly on aesthetics—"which one has more or better-looking options for appearances?" These types of players don't care for self-representation, only self-expression through fashion, either of their own sense of fashion or to simply show off their aesthetic tastes, preferences, and what they enjoy or are attracted to.

Online Survey Instrument

Overall, research findings from psychology, queer theory, and feminism/feminist theory shows that predictably self-identity of the player plays a large part in both their player orientation or intent for the game and their avatar, which then also would affect the type of player-to-player character relationships that they prefer or tend to form through gameplay. Possible factors of influence include the gender similarity of the player and their player character, social discrimination against players based on their perceived gender, differences in visual appearance and aesthetic options across gender and race of the player character in character customization, player orientation and purpose in gameplay such as combat or social motivations, and self-concept clarity and the self-discrepancy theory informing player intent towards self-representation through escapism.

These factors and considerations informed the design and development of the main survey instrument used for this study—a non-identifying online survey administered using Qualtrics to voluntary participants recruited through online communities, mainly through the

r/FFXIV forum on the Reddit website using a public post with an open call for voluntary participants for the non-identifying online survey for the purpose of studying player-to-player character relationships in *Final Fantasy XIV* through player purpose and intent, specifically as related to utilitarian and self-representational type relationships. Further recruitment was completed in the form of advertisement in the self-promotional channels of two games-related Discord servers: the EGD Collective which is a non-profit organization targeted at supporting underrepresented undergraduate and graduate students aiming to break into the games industry, and the Creators' Guild, a medium-sized online community of *Final Fantasy XIV* fan artists. These posts were met with minimal success as shown in both posts accruing only one emote-only response each and are thus highly unlikely to have yielded more than a small handful of new survey participants in total.

Production and Analysis

The non-identifying online survey instrument yielded a total of 287 valid and completed responses, out of a total of 381 submissions received. The survey distribution began on March 1st, 2024, and received a total of 285 valid responses within seventeen days, with one additional response in April and September each to a total of 287. Responses were considered valid if they were fully completed, such that every single question had an associated answer in each submission. A total of 94 responses were excluded from consideration due to missing answers to one or more survey questions.

Survey Question Composition

The survey is composed of nineteen questions, with seven slider questions where the participants must choose on a slider from one to five labelled “1 - Not at all” to “5 - Very strongly.” The first four questions are, in order, on average time spent on playing video games weekly (average weekly playtime), total estimated playtime in *FFXIV* (total *FFXIV* playtime), player age range, and the type of content that one enjoyed the most in *FFXIV* (main content type). Following that are the questions on the gender players chose most often for their player characters in MMORPGs (main gender choice preference), how players chose the gender of their player characters (PC gender choice method), how significant the gender of their player characters (PC) were to players (PC gender value), and how closely players identified with their PC (avatar identification value). The PC gender value and avatar identification value questions are slider questions. Question nine asks what kind of player character players most often create (PC Type) and is also the only question that allows for custom input through the “Other...” option due to the nature of the question. A total of fifteen respondents chose the “Other...”

option, and their answers were qualitatively evaluated and categorized as either existing answers, or as special, and evaluated on a case-by-case basis instead. Out of fifteen of these respondents, ten were categorized into existing answer types while only five were categorized specially. Questions ten through thirteen are all slider questions, asking players how strongly they considered other players' perception during character creation or customization (other player perception value), how strongly they value escapism in games (escapism value), how strongly they value character customization (character customization value), and how strongly they considered their PC as a form of self-expression (PC self-expression value). Following that, the survey asks how respondents would best describe the way they viewed self-expression through their PC (view self-expression through PC). The final slider question is on how strongly players feel that their PCs impact their game experience (PC impact on game experience value), while questions sixteen through eighteen asks players what best described their gender identity (player gender), the gender of their PC as recognized by the game (PC gender), and which in-game race they chose for their PC (PC race). Finally, the last question asks if players felt that their PC is representative of them as a person or not (Player/PC self-representation). The details of each question such as question name, number, and text as presented to participants can be seen in the following table (Table 1).

Table 1

Survey Question Composition

Question Name	Question #	Question Text
Player Average Weekly Playtime	Q1	How often do you play video games per week on average?

Question Name	Question #	Question Text
Player Total FFXIV Playtime	Q2	What is your total estimated playtime in Final Fantasy XIV as of the time of this survey?
Player Age	Q3	How old are you?
Main Content Type	Q4	What type of content do you enjoy the most in Final Fantasy XIV?
Main Gender Choice Preference	Q5	Of these two, which gender do you most often choose for your player characters in MMORPGs in general?
PC Gender Choice Method	Q6	How do you choose the gender of your player character?
PC Gender Value	Q7-S	Is the gender of your player character important to you?
Avatar Identification Value	Q8-S	How closely do you identify with your player character?
PC Type	Q9-O	What kind of player character do you most often create?
Other Player Perception Value	Q10-S	How strongly do you consider other players' perception while creating or customizing your player character?
Escapism Value	Q11-S	How strongly do you value escapism in games?
Character Customization Value	Q12-S	How strongly do you value character customization?
PC Self-expression Value	Q13-S	How strongly would you consider your player character as a form of self-expression?
View of Self-expression Through PC	Q14	How would you best describe the way you view your self-expression through your player character?
PC Impact on Game Experience Value	Q15-S	How strongly do you feel your player character impacts your experience with the game?
Player Gender	Q16	What best describes your gender identity?

Question Name	Question #	Question Text
PC Gender	Q17	What gender is your player character as recognized by the game?
PC Race	Q18	What in-game race is your player character?
Player/PC Self-representation	Q19	Do you feel that your player character is representative of you as a person?

Note. Question # suffix “-S” denotes slider questions, while “-O” denotes optional custom input.

Total *FFXIV* Playtime, Average Weekly Playtime, and Player Age

The purpose of the question on total *FFXIV* playtime was for both basic information collection and to serve as confirmation of how experienced participants were with the game and thus how representative they are of the *FFXIV* environment specifically—if there were a large amount of respondents with less than ten hours of total *FFXIV* playtime, a separate category would have been created for analysis, and this group would have been considered in particular as more indicative of data for general MMORPGs rather than *FFXIV* in particular. However, only five participants reported having a total *FFXIV* playtime of less than 10 hours, and three participants reported having 11 to 50 hours of total playtime, and eight participants for 51 to 100 hours. As such, the results of this study are representative of experienced *FFXIV* players with 271 total (94.44% of all) participants possessing over 100 hours of total playtime in *FFXIV*. It was found that in terms of average weekly playtime, 182 (63.41% of all) participants played on average 13 or more hours of video games per week and 69 (24.04% of all) participants played 8 to 12 hours weekly.

In total, only 26 (9.06% of all) participants spent three to seven hours a week on gaming, 9 (3.14% of all) participants reported one to three hours, and only one participant reported

spending less than an hour a week on average playing video games. Notably, this question asks about all time spent on video games, rather than on *FFXIV* specifically. The data on player age range shows that the majority of players are in the 25 to 34 age range, making up 56.10% (161) of all respondents, while the 18 to 24 age range followed as second highest with a percentage of 26.13% (75), and the second lowest age range reported was the 45 to 54 range with a total of only six (2.09%) participants. Though answer options included age ranges up to 84, no one reported being older than 54.

Self-representational/Utilitarian Player-PC Relationship Type Determination Method

The determination method involved both qualitative and quantitative evaluation across most of the questions posed in the online survey. As there were a total of 287 survey responses to parse, a determination formula was developed to algorithmically categorize as many responses as possible with a focus on accuracy over total coverage. Though most questions in the survey were anticipated factors in self-representational to utilitarian player-PC relationship determination, not all of them were fit for use in the determination formula. In the end, only the questions on avatar identification value, PC self-expression value, PC type, view of self-expression through PC, and Player/PC self-representation were used in the determination formula (Table 2). Specific answers to each question were designated as indicative of utilitarian or self-representational to varying degrees (Table 3).

Table 2*Questions Used in The Player-PC Relationship Type Determination Formula*

Question #	Question Name	Question Text
Q9-O	PC Type	What kind of player character do you most often create?
	Answer Text	Answer Keyword
	An original character with their own story, distinct from yourself	OC Distinct
	Default options, none or little customization	Default PC
	A character distinct from yourself that you find attractive	Attractive Distinct
	Your own self if you were in this game world; A self-insert	Self-Insert
	An ideal version of yourself	Ideal Self
	Other... (Custom Input)	Other
Q14	View of Self-expression Through PC	How would you best describe the way you view your self-expression through your player character?
	Answer Text	Answer Keyword
	I am expressing myself as a person through my character.	Self Through PC
	My character expresses my preferences and choices as a player.	Player Through PC
	My character expresses my actions as a player.	Action Through PC
	My character is not me, but it expresses my preferences and choices as a person.	Distinct Player Through PC
Q19	Player/PC Self-representation	Do you feel that your player character is representative of you as a person?
	Answer Text	Answer Keyword
	Yes, it is me.	PC Is Me
	Yes, it represents me but is its own character.	Yes But OC
	Yes, it represents me, but it is just a puppet.	Yes But Puppet
	No, it doesn't represent me, and is its own character.	No Distinct
	No, it doesn't represent me, it is just a puppet.	No Puppet
Q8-S	Avatar Identification Value	How closely do you identify with your player character?
Q13-S	PC Self-expression Value	How strongly would you consider your player character as a form of self-expression?

Note. Slider questions have values from 1 to 5, labelled as “Not at all” to “Very strongly.”

Table 3

Self-Representational/Utilitarian Determination Answer Evaluation Chart

Question Name	Answer (Keyword or Value)				
	Strongly Utilitarian	Slightly Utilitarian	Neutral	Slightly Self-Representational	Strongly Self-Representational
Avatar Identification Value	1	2	3	4	5
PC Self-expression Value	1	2	3	4	5
PC Type	Default PC, PC Distinct	Attractive Distinct	OC Distinct	N/A	Ideal Self, Self-Insert
Player/PC Self-representation	No Puppet, No Distinct	Yes But Puppet	N/A	Yes But OC	PC Is Me
View of Self-expression Through PC	Action Through PC	Distinct Player Through PC	Player Through PC	N/A	Self Through PC

Notes. The exact answer text for each answer keyword in this table can be found in Table 2.

Self-Representational/Utilitarian Determination Formula

The determination formula categorizes survey responses by running all the data through conditionals that form specific sets of answers from a spectrum of definitively utilitarian to definitively self-representational (Table 4) based on the qualitative evaluation of each specific answer to each question (Table 3). The determination formula focuses on accuracy rather than comprehensive fully automatic categorization, returning only results that match all conditions.

Through this formula, responses that had mixed, neutral, or directly conflicting answers instead returned a value of “Judgement Needed” and were manually and qualitatively evaluated.

There are eight total subtypes of player-PC relationships identified: i. Definitively utilitarian, ii. Strongly utilitarian, iii. Utilitarian, iv. OC Utilitarian, v. OC Self-representational, vi. Self-representational, vii. Strongly self-representational, and viii. Definitively self-representational (Table 4). The conditions for determining the categorization of definitively utilitarian or definitively self-representational are the strictest, as qualifying responses should be a definitive example of either player-PC relationship type. The OC utilitarian and OC self-representational categories were added when it was found that a large amount of both utilitarian and self-representational respondents chose answers that distinguished themselves from their PCs in such a way that their PCs were considered original characters with their own stories. Originally, such answers were categorized as strictly and automatically indicative of either utilitarian or self-representational but were instead ultimately evaluated as only slightly indicative of either based on the wording of each answer option (Table 3). Notably, both OC subtype categorizations do not use PC self-expression value in the determination formula, as it is no longer a strong enough indicator of either utilitarian or self-representational when applied to original character subtypes as while creative expression is a form of self-expression, the survey does not distinguish between the two. Though PC self-expression value is insufficient for the determination formula, it is still significant enough for use in manual qualitative evaluation when considered in combination with all other relevant questions and answers outside of those used in the determination formula.

Table 4*Self-Representational/Utilitarian Determination Formula Chart*

Question	Player-PC Relationship Type							
	Definitively Utilitarian	Strongly Utilitarian	Utilitarian	OC Utilitarian	OC Self-Rep.	Self-Rep.	Strongly Self-Rep.	Definitively Self-Rep.
Avatar Identification Value	1	1 or 2	1 or 2	1 or 2	4 or 5	4 or 5	4 or 5	5
PC Self-expression Value	1	1 or 2	1 or 2	N/A	N/A	4 or 5	4 or 5	5
PC Type	Default PC, Attractive Distinct, or PC Distinct	OC Distinct, Default PC, Attractive Distinct, PC Distinct	OC Distinct, Default PC, Attractive Distinct, PC Distinct	OC Distinct	OC Distinct	OC Distinct, Ideal Self, Self-Insert, Attractive Distinct	Ideal Self, Self-Insert	Ideal Self, Self-Insert
Player/PC Self-representation	No Puppet, No Distinct	No Puppet, No Distinct	Yes But Puppet, No Distinct	Yes But OC, No Puppet, No Distinct	Yes But OC, Yes But Puppet, No Distinct	Yes But OC, Yes But Puppet, PC is Me	Yes But OC, PC Is Me	PC Is Me
View of Self-expression Through PC	Action Through PC	Action Through PC, Distinct Player Through PC	Action Through PC, Distinct Player Through PC, Player Through PC	Distinct Player Through PC, Player Through PC	Distinct Player Through PC, Player Through PC	Self Through PC, Player Through PC, Distinct Player Through PC	Self Through PC	Self Through PC

Self-representational/Utilitarian Determination Findings

Most player-PC relationships are not only wholly self-representational or wholly utilitarian and are instead somewhere on the spectrum. There were 117 survey responses that required manual qualitative judgement due to mixed and neutral answers that the determination formula failed to sort, of which approximately 60 of those responses requiring in-depth qualitative analysis of answers from questions other than the ones used in the determination formula. Some responses also had directly contradictory answers, resulting in a total of twelve respondents whose player-PC relationships could not be reliably determined or were extraordinary—these were categorized as “Other.” This data indicates that many players are either unsure of the nature of their relationship with their PCs or have complex relationships that are difficult to define or communicate accurately within the scope of the survey. Though it was predicted that there would be a significantly higher amount of self-representational type player-PC relationships as compared to utilitarian, the total percentage of self-representational type relationships is only 66.55%, as compared to utilitarian which is 29.27%, and “Other” which is a percentage of 4.18% (Table 5). Self-representational types of player-PC relationships are still the majority, however, and the specific spread of subtypes across both types is more similar to what was predicted, with a complete lack of definitively utilitarian relationships and 11 definitively self-representational relationships identified. Interestingly, 64.29% of the utilitarian relationships identified belong to the OC Utilitarian subtype, which indicates a higher level of player self-expression through PC despite having more requisite utilitarian answers than self-representational overall.

Table 5

Player-PC Relationship Types: Self-Representational vs. Utilitarian Data

Quantity	Player-PC Relationship Type				
	Definitively Utilitarian	Strongly Utilitarian	Utilitarian	OC Utilitarian	Total Utilitarian
Number	0	18	12	54	84
Percentage of Utilitarian	0%	21.43%	14.29%	64.29%	N/A
Percentage of Total	0%	6.27%	4.18%	18.82%	29.27%
	Definitively Self-Rep.	Strongly Self-Rep.	Self-Rep.	OC Self-Rep.	Total Self-Rep.
Number	11	36	101	43	191
Percentage of Self-Rep.	5.76%	18.85%	52.88%	22.51%	N/A
Percentage of Total	3.83%	12.54%	35.19%	14.98%	66.55%

Note. Not included in this chart is “Other,” with a quantity of 12 and a percentage of 4.18%.

Player Character Customization and Value

Players were asked about how strongly they valued character customization, and the overwhelming majority responded with high values of four and five, with overall percentages of 23.34% and 69.34% respectively to a total of 92.68%. In comparison, only 14 (4.88%) respondents felt completely neutral about character customization value with five (1.74%) respondents answering with a value of two, and two (0.70%) respondents with a value of one. Similarly, 79.44% of players felt that their PCs strongly impact their experience with the game, reporting high values of four and five, with 121 (42.16%) and 107 (37.28%) players respectively. Unlike the data on character customization value, however, there were 48 (16.72%) respondents that reported a neutral value of three, though only 11 (3.83%) respondents in total evaluated

values of PC impact on their game experience at two or less. Additionally, data shows that most respondents did not consider other players' perception during character creation and customization, with 50.52% of players answering with a value of one or two, 26.48% of players answering with a neutral value of three, and only 13.94% and 9.06% of all participants answering with values of four and five respectively. In total, only 23% of players felt strongly about other players' perceptions during PC creation, while 77% of players did not particularly care or value it highly.

In terms of PC Type, the data shows that the most popular type of PC that players created was "OC Distinct," an original character distinct from themselves, with 46.34% of all respondents choosing "OC Distinct." Second most popular was the "Ideal Self," where 19.51% of all respondents most often created PCs that were the ideal version of themselves, and the third most popular PC Type was "Attractive Distinct," where 17.42% of all respondents most often created player characters that were distinct from themselves that they found attractive. Meanwhile, 10.45% of all respondents most often made PCs that were self-inserts, or their own selves if they were in the game world, and 5.23% of all respondents were categorized as "Other" due to being uncategorizable. Finally, only 1.05% of all respondents mainly created "Default PCs" that had default options with little to no customization. It was initially predicted that all "Attractive Distinct" respondents would be utilitarian players, but results showed that 15 (30%) out of the 50 total "Attractive Distinct" respondents had self-representational types of player-PC relationships, with five of those being of the OC self-representational subtype.

Player and Player Character Gender Similarity

In terms of player gender, 17 (5.92%) participants stated that they were unsure about or questioning their gender, 44 (15.33%) players reported that they were nonbinary, 27 (9.41%) players were transgender, 66 (23%) players were cisgender female, and 133 (46.34%) players were cisgender male. Notably, *FFXIV* has a particularly high amount of queer players in its demographic, which includes players of non-binary, transgender, and questioning genders. Though these figures are quite high relative to the general population, these are expected numbers for the *FFXIV* player demographic overall. There are a total of 226 (78.75%) binary gendered players, that is, players that are either female or male, and a total of 61 (21.25%) players that are nonbinary or unsure/questioning. In terms of PC gender, there is a significantly larger number of female PCs than male PCs as reported by the data, with 178 (62.02%) total female PCs and 109 (37.98%) total male PCs. Interestingly, this ratio contrasts with the ratio of binary player genders which is of 90 (39.82%) total female players to 136 (60.18%) total male players.

Player genders were compared with their PC genders, and it was found that zero transgender players had PCs with a gender different from their own, while 13 cisgender female players and 60 cisgender male players did (Table 6). Meanwhile, there is an even split in terms of the female-to-male ratio of players with similar PC genders to their own, with 77 female players and 76 male players in total (Table 7). Out of a total of 226 binary and valid comparisons, a total of 153 (67.7%) participants had PCs with the same gender as their own, while 73 (32.3%) participants had PCs of a different gender to their own. Nonbinary and unsure/questioning players were excluded from this comparison due to the inability to choose the same gender as their own for their PCs, as only binary options are available. Instead, PC gender data comparisons were done separately for nonbinary and unsure/questioning participants, and it

was found that out of 44 nonbinary players, 65.91% (29) of them had a female PC while 34.09% (15) had a male PC. Similarly, out of 17 unsure/questioning players, 70.59% (12) of them had female PCs while 29.41% (5) had male PCs. As assigned sex at birth was not a question included in the online survey, comparisons between players' assigned sex at birth and the gender of their PCs were not possible.

Table 6

Player/PC Gender Difference Chart

Quantity	Player Gender				Total Different
	Transgender Female	Cisgender Female	Transgender Male	Cisgender Male	
Number	0	13	0	60	73
Percentage of Different	0%	0%	0%	0%	100%
Percentage of Binary	0%	5.75%	0%	26.55%	32.30%
Percentage of Total	0%	4.53%	0%	20.91%	25.44%

Notes. The Percentage of Binary doesn't account for data from non-binary and unsure/questioning players, while Percentage of Total does. The difference in these two values comes from this exclusion of the 61 nonbinary and unsure/questioning players.

Table 7*Player/PC Gender Similarity Chart*

Quantity	Player Gender						
	Transgender Female	Cisgender Female	Transgender Male	Cisgender Male	Total Female	Total Male	Total Similar
Number	24	53	3	73	77	76	153
Percentage of Similar	15.69%	34.64%	1.96%	47.71%	50.33%	49.67%	100%
Percentage of Binary	10.62%	23.45%	1.33%	32.30%	34.07%	33.63%	67.70%
Percentage of Total	8.36%	18.47%	1.05%	25.44%	26.83%	26.48%	53.31%

Note. Same notes as Table 6.

Participants were also asked which gender they mostly chose for their PCs in MMORPGs between female and male, and 179 (62.37%) of them chose female, while only 108 (37.63%) chose male. This was compared against the actual gender of their PC in *FFXIV*, and it was found that 272 (94.77%) participants chose the same PC gender as their main gender choice preference as stated, while 15 (5.23%) players had PC genders incongruent with their stated preference.

Player/PC gender similarities were also compared against the number of each subtype of self-representational and utilitarian types of player-PC relationships, and it was found that the ratio of self-representational to utilitarian types of relationships in respondents that have PC genders similar to their own was 78.23% to 21.77% respectively, with 9 out of the 11 total “Definitively Self-Representational” subtype of player-PC relationships belonging to this category. Players with similar PC genders to their own also comprised 60.21% of all respondents with self-representational type player-PC relationships and 38.10% of all utilitarian type

relationships. Players with PC genders different from their own, however, had a ratio of 45.59% to 54.41% of self-representational to utilitarian type player-PC relationships, and comprised 16.23% of all self-representational type relationships and 44.05% of all utilitarian type relationships. Nonbinary and unsure/questioning players, like the players with similar PC genders to their own, also had a high ratio of self-representational type player-PC relationships to utilitarian, with nonbinary players reporting a ratio of 69.77% to 30.23% of self-representational to utilitarian, and unsure/questioning players reporting a ratio of 88.24% to 11.76% of self-representational to utilitarian types of player-PC relationships.

PC Gender Choice Method Data Comparisons

Immediately following the main gender choice preference question, players were asked about how they chose the gender of their PCs (Table 8). The data shows that 50.17% (144) of players predominantly choose the gender most similar to their own, while only 7.67% (22) of players choose a PC gender the most dissimilar to their own. Surprisingly, 41.46% (119) of all respondents answered that they choose PC genders based on whichever has what they consider to be better visual or aesthetic options, such as hairstyles or equipment appearances. As expected, only two (0.70%) respondents stated that they choose the gender of their PC based on whatever is the default or pre-selected option. Participants were also asked to evaluate how important they considered their PC's gender, and it was found that 57.14% (164) of respondents chose a value of 4-5, with 27.87% (80) and 29.27% (84) respectively, while 22.30% (64) were completely neutral about it and 20.56% (59) chose a value of 1-2, with 9.76% (28) and 10.80% (31) respectively.

Data on PC gender choice method was compared against player gender (Table 9), and particularly notable is the fact that out of the two respondents that choose their PC genders based on whatever is the default or pre-selected option, one is cisgender male and the other is unsure/questioning. The highest percentage out of total number of “Similar” PC gender choice method was the total female player gender group (44.44%) which is a category that consisting of both transgender and cisgender female respondents. Cisgender male players made up 12 out of 22 (54.55%) “Dissimilar” PC gender choice method respondents, in contrast to the only other three player gender groups of cisgender female, nonbinary, and unsure/questioning that have three, three, and four “Dissimilar” responses respectively. Similarly, cisgender male players made up 52.94% of all “Aesthetics” PC gender choice method respondents, with the other two significant player gender groups in this category being nonbinary players (19.33%) and cisgender female players (15.97%). Notably, the majority of unsure/questioning players stated that they mainly chose the gender of their PC based on whichever has better aesthetic options, with eight (47.06%) out of seventeen players choosing based on aesthetics, four (23.56%) players each for “Similar” and “Dissimilar,” and one player being one of the only two respondents total to choose “Default” as their PC gender choice method.

In terms of which PC gender choice methods were the most popular amongst individual player gender groups, however, “Similar” was the most popular amongst transgender female (83.33%) and cisgender female (66.67%) players, and second most popular with cisgender male players (42.86%). Interestingly, there is only a 4.51% difference between the first and second most popular PC gender choice methods amongst cisgender male players, as the most popular “Aesthetics” saw a 47.37% pick rate out of all cisgender male players compared to the 42.86% pick rate of the “Similar” PC gender choice method. “Aesthetics” was the most popular choice

for nonbinary (52.27%) and unsure/questioning (47.06%) players, though “Similar” places a close second in popularity amongst nonbinary players with a pick rate of 40.91%.

Table 8

PC Gender Choice Method Question Information

Question Name	Question Text
PC Gender Choice Method	How do you choose the gender of your player character?
Answer Text	Answer Keyword
I choose the gender most similar to my own.	Similar
I choose the gender most dissimilar to my own.	Dissimilar
Whatever is the default or pre-selected option.	Default PC Gender
Whatever option has better visual options or aesthetics, such as hairstyles or equipment appearances.	Aesthetics

Though PC gender choice method was not a question used in the self-representational and utilitarian type determination formula, the answers to this question were still used alongside other data like PC gender value, other player perception value, and player/PC gender similarity as a part of the methodology for qualitative manual evaluation.

Table 9*PC Gender Choice Method by Player Gender*

Quantity	PC Gender Choice Method by Player Gender								
	Transgender Female	Cisgender Female	Transgender Male	Cisgender Male	Nonbinary	Unsure or Questioning	Total Female	Total Male	Total Transgender
	Most Similar to Self								
Number	20	44	1	57	18	4	64	58	21
Percentage of Player Gender	83.33%	66.67%	33.33%	42.86%	40.91%	23.53%	71.11%	42.65%	77.78%
Percentage of Choice Method	13.89%	30.56%	0.69%	39.58%	12.50%	2.78%	44.44%	40.28%	14.58%
	Most Dissimilar to Self								
Number	0	3	0	12	3	4	3	12	0
Percentage of Player Gender	0%	4.55%	0%	9.02%	6.82%	23.53%	3%	8.82%	0%
Percentage of Choice Method	0%	13.64%	0%	54.55%	13.64%	18.18%	13.64%	54.55%	0%
	Based on Aesthetics								
Number	4	19	2	63	23	8	23	65	6
Percentage of Player Gender	16.67%	28.79%	66.67%	47.37%	52.27%	47.06%	25.56%	47.79%	22.22%
Percentage of Choice Method	3.36%	15.97%	1.68%	52.94%	19.33%	6.72%	19.33%	54.62%	5.04%
	Default PC Gender								
Number	0	0	0	1	0	1	0	1	0
Percentage of Player Gender	0%	0%	0%	0.75%	0%	5.88%	0%	1%	0%
Percentage of Choice Method	0%	0%	0%	50%	0%	50%	0%	50%	0%

Notes. Percentage of Player Gender represents how many of each player gender group chose each PC gender choice method within the same player gender group.

PC gender choice method was also compared against how much players valued the gender of their PC, and it was found that 70.14% of all “Similar” respondents valued PC gender highly with values of four or five. Meanwhile, 54.55% of all “Dissimilar” respondents value PC gender highly and with 22.73% respondents reporting a neutral value of three and the final 22.73% of “Dissimilar” respondents reporting low values of one or two. Out of the two “Default” respondents, one answered that they did not care about the gender of their PC at all with a value of one, while the other answered with a neutral value of three. This makes sense, as only players that do not particularly care about the gender of their PC would go with whatever the default gender option was for their PCs in any given game. These were the same expectations for players that chose the “whatever option has better visual options or aesthetics, such as hairstyles or equipment appearances” answer, as the wording implies that the gender of the PC is not as important to them as visual or aesthetic quality. Contrary to this prediction, however, 42.86% “Aesthetics” respondents reporting high values of four or five for PC gender value, with 27.73% of respondents that reporting a neutral value of three, and only 29.41% of all “Aesthetics” respondents reporting low PC gender values of one or two. One possible explanation for this discrepancy is that respondents may have weighed how much they valued aesthetic quality against similar or dissimilar genders to their own when answering this survey question, not necessarily having a significant lack of PC gender value but rather considering aesthetic quality slightly more important than the gender of their PC being either the most similar or dissimilar to their own. It is also possible that players might judge aesthetics and visual

options differently based on their preferences for more feminine or more masculine aesthetic options. However, these hypotheses cannot be truly confirmed without further qualitative data.

Comparisons were also made between the data on PC gender choice method and the data on player/PC gender similarities, and it was found that out of 73 respondents with different PC genders from their own, 80.82% of them reported choosing their PC gender based on “Aesthetics,” 19.18% of respondents answered with “Dissimilar,” and none had a “Similar” PC gender choice method. Out of 153 respondents that had PC genders like their own, 79.74% of them reported a “Similar” PC gender choice method, 18.95% of them answered with “Aesthetics,” and only one of them answered with “Dissimilar” and one with “Default PC Gender.” Though it is likely coincidence that the default PC gender happened to be the same as the gender of that respondent, it is interesting that one respondent with a “Dissimilar” PC gender choice method nevertheless has a PC of the same gender as their own. It is possible that they felt motivated in some way to do so within *FFXIV*, though it is impossible to confirm without further qualitative questioning.

Additionally, it was found that 86.36% of all respondents that answered with the “Dissimilar” PC gender choice method had high escapism values of four and five, with only four respondents (13.64%) reporting low escapism values of one and two, and no neutral values of three at all. This is the highest ratio of high escapism values among all four PC gender choice methods, followed by “Aesthetics” respondents at 74.79% of high escapism values with 15.13% of neutral values of three and 10.08% of low values of one and two, and “Similar” respondents at 62.50% of high escapism values with 28.47% of neutral values of three and only 9.03% of low values of one and two. “Default PC Gender” respondents had an even split of one escapism value of two, and one escapism value of three. When compared to the standalone data on escapism

values across all respondents (Table 12), PC gender choice methods of “Dissimilar” and “Aesthetics” had significantly higher percentages of respondents with high escapism values. The standalone data shows that 68.99% of all respondents had high escapism values, 20.91% had a value of three, and only 10.10% of all respondents had low escapism values of one and two (Table 12). In comparison, the “Dissimilar” PC gender choice method had 17.37% more high escapism value respondents and no medium value respondents, while “Aesthetics” saw a 5.8% increase in high escapism value respondents than the standalone data. Meanwhile, “Similar” type respondents saw fewer high escapism value respondents by 6.49%, and had 7.56% more medium value respondents despite having a slightly lower percentage of low escapism value respondents by a difference of only 1.07% compared to the standalone data.

PC gender choice method data was also compared with self-representational and utilitarian types of player-PC relationships, and it was found that the ratio of self-representational to utilitarian types of relationships in respondents that chose the “Similar” PC gender choice method was 84.67% to 15.33%. “Similar” respondents contributed to 40.42% out of all self-representational type player-PC relationships, and only 7.32% out of all utilitarian type player-PC relationships. Comparably, the ratio of “Dissimilar” respondents’ self-representational to utilitarian type relationships was 63.64% to 36.36%, with a less significant majority for self-representational player-PC relationships as compared to “Similar.” The two “Default Gender” PC gender choice method respondents, however, had an even split of one self-representational and one strongly utilitarian subtypes of player-PC relationships. Likewise, “Aesthetics” respondents saw a very even 52.63% to 47.37% ratio of self-representational to utilitarian, and these comprised of 20.91% of all self-representational and 18.82% of all utilitarian type player-PC relationships. As the two most popular PC gender choice methods are “Similar” with a total

of 144 respondents and “Aesthetics” with a total of 119 respondents, the much less popular “Dissimilar” with 22 total respondents only comprises 4.88% of all self-representational and 2.79% of all utilitarian type player-PC relationships.

Main Content Type

Main content type was included to investigate any potential relationships between gameplay preferences in players—also known as player orientation—as existing research on *FFXIV* shows that player orientation can inform psychological inclinations towards accruing certain types of capital (Korkeila & Hamari, 2020) as well as level of engagement and excitement with the game (Wang et al., 2021). The answer options were loosely based on Bartle’s typology of players (as cited in Wang et al., 2021), allowing players to choose from four options: “Roleplaying,” “Social or group content,” “Combat,” and “PvP (Player versus Player).” Survey results showed that 90.6% of participants mainly enjoy either social or group content (36.59%) or combat (54.01%) types of content in *FFXIV* (Table 10). Notably, this survey question did not include answer options for exploratory content such as crafting or gathering, nor was there an option for answering with custom input.

Table 10

Main Content Type Data Chart

Main Content Type				
Quantity	Roleplaying	Social or Group content	Combat	PvP (Player versus Player)
Number	23	105	155	4
Percentage of Total Players	8.01%	36.59%	54.01%	1.39%

Notes. The question text was “what type of content do you enjoy the most in Final Fantasy XIV?”

These four main content types were compared against data on PC gender values, PC gender choice methods, values of PC impact on game experience, and self-representational and utilitarian types of player-PC relationships. It was found that 78.26% of all roleplaying-oriented players valued PC gender very highly with values of four and five, 17.39% valued PC gender very lowly with values of one and two, and only 4.35% of roleplaying-oriented players felt neutrally about the gender of their player characters. This high value majority is most likely due to the fact that roleplayers typically have or create original characters to use to roleplay with, and gender is a very important part of forming both real and fictional identities. Social or group content-oriented players similarly reported mostly highly valuing PC gender with a ratio of 62.86% to 24.76% to 12.38% for high values, medium values, and low values respectively. Interestingly, combat-oriented players had a somewhat similar distribution of values though with fewer high values and the most low values out of all four main content types, with a ratio of 50.32% to 22.58% to 27.10% for high, medium, and low values respectively. Though it was expected that combat-oriented players would care less about the gender of their PC and they did have the smallest percentage of high PC gender values with the greatest number of low PC gender values by far, the lowest percentage of high PC gender values amongst main content types was still 50.32%. Out of the three total PvP-oriented players, one had a PC gender value of five, one had a value of four, and the final player had a neutral value of three. Despite being mainly interested in PvP content, all three players still valued the gender of their PCs neutral to very highly.

In terms of PC gender choice methods, roleplaying-oriented players saw a ratio of 56.52% to 43.48% of “Similar” to “Aesthetics” PC gender choice methods, with zero respondents choosing “Dissimilar” or “Default Gender,” which is very similar to the PvP-oriented players whom have an even fifty-fifty split between “Similar” and “Aesthetics.” This trend continues, as social or group content-oriented players saw a ratio of 47.62% to 8.57% to 43.81% for “Similar,” “Dissimilar,” and “Aesthetics” PC gender choice methods respectively. Notably, all two of the “Default Gender” gender choice method respondents are combat-oriented players, and the “Combat” main content type also harbors the largest number of “Dissimilar” PC gender choice method respondents among all main content types totaling at 13, even though the percentage of “Dissimilar” answers within the combat-oriented player group is technically lower at 8.39%. Out of all combat-oriented players, 50.97% of them chose the “Similar” PC gender choice method and 39.35% of them chose the gender of their PCs based on aesthetics.

Excluding PvP-oriented players, all other main content type categories saw a ratio distribution similar to or higher than the overall standalone data on how strongly players felt their PC impacts their experience with *FFXIV* (Table 11). Social or group content-oriented players in particular saw a ratio of 84.76% to 13.33% to 1.90% of high, medium, and low values respectively of PC impact on game experience, and roleplaying-oriented players similarly had a distribution ratio of 82.61% to 13.04% to 4.35% of high, medium, and low values respectively. Meanwhile, combat-oriented players saw a 74.84% to 20% to 5.16% ratio of high, medium, and low values respectively. Interestingly, none of the PvP-oriented players had low values of PC impact on game experience, instead having all four players reporting high values, three of which answered four, with one player answering the maximum value of five. Combat was the only main content type group that saw a lower ratio of high PC impact on game experience values

than the overall standalone ratio, with 74.84% of combat-oriented players as compared to the 79.44% from the standalone data. Though social or group content and roleplaying main content types both share very similar distributions of values, social or group content-oriented players had the fewest relative number of low values, and neither main content type saw respondents with values of one, while the combat main content type group had 100% of all five overall respondents with the lowest value of one for PC impact on game experience value.

Table 11

PC Impact on Game Experience Value Data Chart

PC Impact on Game Experience Value					
Quantity	Low		Medium	High	
	1	2	3	4	5
Number	5	6	48	121	107
Percentage of Total Players	1.74%	2.09%	16.72%	42.16%	37.28%
Total	3.83%		16.72%	79.44%	

Notes. The question text was “how strongly do you feel your player character impacts your experience with the game?”

Interestingly, it was found that all four of the PvP-oriented players had self-representational player-PC relationships, with one being of the OC self-representational subtype. Social or group content-oriented players had the largest ratio percentage of self-representational types of player-PC relationships, with a ratio of 75% to 25% of self-representational to utilitarian types. Roleplaying-oriented players had the second highest ratio of self-representational to utilitarian types of relationships at 69.57% to 30.43% respectively. In terms of total self-

representational and utilitarian type relationship composition, roleplaying-oriented players made up 5.57% of all self-representational type relationships and 2.44% of all utilitarian types of player-PC relationships, while social or group content-oriented players made up 26.13% of all self-representational type relationships and 8.71% of all utilitarian type relationships. Due to the combat main content type having the greatest total number of respondents, combat-oriented players made up 33.45% and 18.12% of all self-representational and utilitarian types of player-PC relationships respectively. As compared to the overall ratio of self-representational to utilitarian types of player-PC relationships of 69.45% to 30.55% respectively, roleplaying-oriented players saw essentially the same distribution, while combat-oriented players were shown to have fewer self-representational (64.86%) types and more utilitarian (35.14%) types of relationships, and social or group content-oriented players saw a far greater number of self-representational (75%) type relationships than utilitarian (25%).

Escapism Value, PC Impact Values, and Player-PC Relationship Types

Comparisons were made between escapism values (Table 12) and the data on the self-representational and utilitarian types of player-PC relationships seen from the respondents (Table 5). Out of all respondents with high escapism values of four or five, 71.20% of them had self-representational types of player-PC relationships and 28.80% of them had utilitarian types. Players with escapism values of three also saw a similar ratio of 75% to 25% of self-representational to utilitarian types respectively, while low escapism value respondents saw a ratio of 46.43% to 53.57% of self-representational to utilitarian. Compared to the standalone data on self-representational and utilitarian player-PC relationship types that saw a ratio of 69.45% to 30.55% self-representational to utilitarian types of relationships, high escapism values had 1.75% more self-representational type relationships than utilitarian, medium values saw 5.55% more

self-representational than utilitarian types, and low escapism values saw 23.02% more utilitarian than self-representational types of player-PC relationships.

Comparisons were also made on how strongly players felt their PCs impacted their game experience (Table 11) according to their self-representation and utilitarian types of player-PC relationships (Table 5). It was found that players with low values of PC impact on game experience had a ratio of 80% to 20% of utilitarian to self-representational types of player-PC relationships, with five out of the eight total utilitarian types of player-PC relationships belonging to the strongly utilitarian subtype. Medium PC impact on game experience value (PC impact values) respondents saw a 59.57% to 40.43% ratio of self-representational to utilitarian types of player-PC relationships, while respondents with high PC impact values of four and five saw a ratio of 73.85% to 26.15% of self-representational to utilitarian types. Compared to the standalone data on types of player-PC relationships, low PC impact values saw far more utilitarian type players by a difference of 49.45%, medium PC impact values saw 9.88% fewer self-representational types and 9.88% more utilitarian types, and high PC impact values saw 4.4% more self-representational types and 4.4% less utilitarian types of player-PC relationships.

Table 12*Escapism Value Data Chart*

Quantity	Escapism Value				
	Low		Medium		High
	1	2	3	4	5
Number	5	24	60	81	117
Percentage of Total Players	1.74%	8.36%	20.91%	28.22%	40.77%
Total	10.10%		20.91%		68.99%

Notes. The question text was “how strongly do you value escapism in games?”

Analysis was conducted on the ratio of self-representational to utilitarian types of player-PC relationships amongst players with both high average weekly playtimes of eight or more hours per week as compared to their escapism values. It was found that of all players that had both high average weekly playtimes of eight or more hours per week and high escapism values of four or five, 70.91% of them had self-representational types of player-PC relationships, and 29.09% of them had utilitarian types. Compared to the standalone self-representational to utilitarian data percentages, players with both high average weekly playtime and high escapism saw 1.46% more self-representational types of relationships than utilitarian. Meanwhile, players with high average weekly playtime but low escapism values of one or two saw a ratio of 46.15% to 53.85% of self-representational to utilitarian types of player-PC relationships. High average weekly playtime and low escapism value respondents saw a 24.76% increase in utilitarian type player-PC relationships compared to those with both high average weekly playtime and high escapism values, and overall saw a 23.3% increase in utilitarian type relationships compared to the standalone data on self-representational and utilitarian types of player-PC relationships.

Conclusions

This study found that most *FFXIV* players have self-representational types of player-PC relationships as opposed to utilitarian types, with a total data composition of 66.55% self-representational, 29.27% utilitarian, and 4.36% other (indeterminable) types of player-PC relationships. Overall, results showed that most players did not particularly care about or value other players' perceptions very much during character creation and customization. Most players that were of binary gender—either male or female—chose PC genders that were the same as their own, with only 32.3% of players choosing a gender different from their own for their PC. Players with congruent player/PC genders saw a higher ratio of self-representational to utilitarian types of player-PC relationships, with an 8.78% increase compared to the standalone average. Meanwhile, binary players with incongruent player/PC genders saw an increase of 23.86% utilitarian type player-PC relationships compared to the standalone average. Based on existing studies on transgender players and their relationship with MMORPGs and PCs, it was predicted that transgender players were significantly more likely to have PC genders like their own (Morgan et al., 2020; Cantrell & Zhu, 2022; Rivera, 2022). The results of this study supports this, as all transgender survey respondents reported having PCs with genders the same as their own. Notably, even though 22.22% of all transgender respondents said that their main PC gender choice method was mainly based on aesthetics rather than similarity to own gender, all of them still chose PC genders congruent with their own gender identity.

The two most popular methods of choosing PC genders are to choose what is the most similar to the player's own gender identity, and to choose based on whichever PC gender has the better visual or aesthetic options as perceived by the player. There were only two respondents that do not choose their PC genders at all and instead go with whatever the default or pre-

selected option is, and only 7.67% out of all survey respondents predominantly chooses the PC gender that is the most different from their own. Most similar-to-self gender choice method respondents valued the gender of their PC very highly, while only 54.55% of all dissimilar-to-self gender choice method respondents valued PC gender highly and 45.45% of them either did not have strong feelings on the matter or did not find the gender of their PCs to be important at all. Out of all players with PC genders different to their own, 80.82% of them reported choosing their PC gender based on aesthetics, 19.18% based on PC gender most dissimilar to their own, and none that prioritized PC genders similar to their own. Out of 153 respondents that had PC genders like their own, 79.74% of them chose PC gender based on similarity to self, 18.95% of them chose based on aesthetics, only one chose based on the gender most different to their own, and one that chose the default. Even though the “Aesthetics” answer for the PC gender choice method question strongly implies that PC gender is not as important as pure visual or aesthetic quality, 42.86% of all “Aesthetics” respondents still valued the gender of their PC very highly, and instead of an even split between “Aesthetics” respondents that had PC genders both similar and different to their own, the actual ratio of “Aesthetics” player/PC gender similarity to difference was 19.18% to 80.82%. Based on these findings, it can be inferred that players that predominantly choose the gender of their PCs based on perceived aesthetic quality rather than gender identity most likely still value gender expression in terms of personal preferences towards more feminine or masculine character customization options.

It was found that 86.36% of all respondents that choose the gender of their PC based on whatever is the most different from themselves highly valued escapism in games. It was found that the ratio of self-representational to utilitarian types of relationships in respondents that choose PC genders most like their own was 84.67% to 15.33% respectively, while the ratio of

self-representational to utilitarian types for PC gender choice method of most dissimilar to self was 63.64% to 36.36%. Aesthetics-based gender choice method players, however, saw a more evenly split ratio of self-representational to utilitarian types of player-PC relationships as 52.63% to 47.37% respectively. This study also investigated main content type preferences amongst players and found that the majority of players enjoyed combat the most, followed by social or group content, and only 8.01% of all respondents favored roleplaying the most, with the least popular category being PvP content with only four players. It was found that 78.26% of all roleplaying-oriented players and 62.86% of all social or group content-oriented players valued the gender of their PCs very highly, while only 50.32% of combat-oriented players highly valued the gender of their PCs. The data also shows that 79.44% of all players felt that their PC has a significant impact on their game experience, while only 3.83% of all players felt like their PC did not impact their game experience at all. Excluding PvP-oriented players, all other main content type categories saw a ratio distribution similar to or higher than the overall standalone data on how strongly players felt their PC impacts their experience with the game.

Based on research findings on gaming disorder about its positive relationship with avatar identification, gaming addiction defined by high average weekly time spent on video games and high escapism values, and gaming disorder motivated by the desire to play as representations of their ideal selves due to poor self-concept clarity (Loewen et al., 2021; Szolin et al., 2022; Fraser et al., 2023), it was predicted that respondents with both high average weekly playtime and high escapism values would also have a high percentage of self-representational types of player-PC relationships. This was found to be true, though there was only a slight (1.46%) increase in the ratio of self-representational to utilitarian types of relationships in players with both high average weekly playtime and high escapism values rather than a large portion. More importantly, there is

a drastic difference seen in players with high average weekly playtimes but low escapism values with a 23.3% increase in utilitarian types of relationships compared to the standalone data average. Based on this data, it can be inferred that in agreeance with existing research findings on gaming addiction, players with gaming addiction are slightly more likely to have self-representational types of player-PC relationships, while players with high average weekly playtimes but do not seek escapism are more likely to be utilitarian players that play actively but not necessarily abusively. It is thus recommended that scholars interested in researching gaming addiction consider self-representational and utilitarian type distinctions in player-PC relationships in future research. Further research should be conducted on the relationship between gaming addiction and players with utilitarian type player-PC relationships specifically, as it is possible that players with gaming addiction are not motivated by self-representation due to poor self-concept clarity (Loewen et al., 2021; Szolin et al., 2022; Fraser et al., 2023) and are instead motivated by utilitarian factors like addictive gameplay loops where the PC does not matter insofar as the game itself.

Based on the findings from this study, it is recommended that MMORPG game designers and developers should pay special attention to their player characters and character customization options regardless of genre, as most players regardless of main content type strongly consider their PCs to be highly impactful on their game experience. Overall, game designers should also pay particular attention to the visual quality of character customization options regardless of PC gender, as the data shows that most players choose the gender of their PCs based on either whichever option has the best aesthetics and visual options or based on whichever PC gender is the closest to their own. Additionally, only 17.42% of all respondents mainly created PCs that they found attractive and were distinct from themselves, and 30% of

those had self-representational types of player-PC relationships rather than utilitarian. These results show that game designers should not focus only on the quality and quantity of customization options for PCs based on what PC genders they anticipate players will use to create characters that they find attractive, as only 17.42% of all players create PCs based on attractive appearances, and a significant number of these players are seeking self-representation through their PCs rather than solely creating characters for utilitarian aesthetic purpose.

Recommendations for Future Research

Based on the comments left by survey respondents on the initial distribution post on the r/FFXIV subreddit website indicating demand for a greater variety in the main content type options, as some respondents felt that they were forced to choose what they thought of as their second-best option for the type of content they mainly enjoyed. Though the answer options were limited on purpose assuming that crafting, gathering, and optional side content like area development through repeatable quests would be an insignificant enough number of players to not affect the overall findings due to its exclusion, the player response indicates that there are at least enough people that care about it to leave a comment about it. Initially overlooked was the fact that unlike a lot of MMORPGs, *FFXIV* has a particularly in-depth crafting and gathering system and the *FFXIV* development team often puts an unusually high amount of development time and effort into side content such as the Island Sanctuary, a completely optional but rather popular system with unique content progression completely distinct from regular gameplay and features no combat whatsoever. There is also a well-known community of players that enjoy fishing content in *FFXIV* the most, as the fishing system is similarly in-depth with mechanics like unique real-time spawn conditions for different kinds of fish that players enjoy pursuing and investigating. It is recommended that future studies on player preferences regarding content type

in *FFXIV* include significant inquiry into content such as crafting/gathering, exploratory, and other side content. Respondents also left feedback regarding the desire for more custom input options for questions as many of these commentators felt that they could not sufficiently describe things like the type of content they most enjoyed, player gender identity, and the specific way in which they viewed their self-expression through their PCs.

Notably, a significant portion of respondents identified as being either non-binary or unsure/questioning regarding their gender and were thus excluded from the data comparisons regarding player/PC gender similarity due to *FFXIV* only allowing binary options of male or female. This exclusion occurred due to the lack of a question on players' assigned sex at birth which could have possibly yielded interesting data and insight into questions like if non-binary or unsure/questioning players tended to choose PC genders more similar to their assigned sex at birth or not, and the reasons or motivations behind such decisions. It is highly recommended that future studies on player-PC relationships or related to player identity include the option for custom input in player gender identity questions, as it would allow players to more accurately describe their gender identity and allow researchers to thus draw connections between nonbinary or unsure/questioning players and their PC gender choice methods. For example, if a nonbinary player chose PC gender based on what is closest to their gender identity rather than their assigned sex at birth, or if an unsure/questioning player chose PC gender based on what is most different from their assigned sex at birth in an attempt to explore gender expression and identity through their PCs (Morgan et al., 2020; Cantrell & Zhu, 2022; Rivera, 2022). These investigations would be made possible with the inclusion of both a question on assigned sex at birth and an option for custom input for any questions on player gender identity. It is also recommended that researchers investigate character customization options specifically regarding

distribution of aesthetic quality across gender and race restricted appearances and visual options with particular attention paid to aesthetic style based on femininity and masculinity regardless of PC gender, as the resulting data could be particularly useful for game designers regardless of genre.

It is recommended that future research conducted on player-to-player character relationships more significantly involve qualitative data collection, such as providing custom input options for answers, or conducting one-on-one interviews such that researchers may ask follow-up questions or inquire about any conflicting answers received from the respondents. As no prior research has been conducted on player-to-player character relationships in terms of self-representational or utilitarian based on player purpose and intent toward their PCs, this study was focused on both developing a determination method for the self-representational/utilitarian typology and on starting the investigation into this topic through inquiring about a broad variety of anticipated factors that may affect types of player-PC relationships, though mainly focusing on player identity through gender and main content type preferences. It is highly recommended that future research into self-representational and utilitarian type player-PC relationships narrow their research focus and investigate individual variables or categories of factors based on the results of this study. Recommended areas and topics for future research include how gendered or feminine and masculine character customization options might affect self-representational and utilitarian types of player-PC relationships, how the amount of total *FFXIV* playtime and degree of main story quest progression might affect the way players view their PCs after spending time with them, and new research on players that create and play as multiple different PCs rather than only using one main PC and how that might affect the types of relationships that they might have with each player character.

References

- Brown, T., Burleigh, T. L., Schivinski, B., Bennett, S., Gorman-Alesi, A., Blinka, L., & Stavropoulos, V. (2024). Translating the user-avatar bond into Depression risk: A preliminary machine learning study. *Journal of Psychiatric Research, 170*, 328–339. <https://doi.org/10.1016/j.jpsychires.2023.12.038>
- Buyukozturk, B. (2021). Reproducing the gaming gender hierarchy. *Symbolic Interaction, 45*(1), 27–49. <https://doi.org/10.1002/symb.553>
- Byrne, S., Allen, A., Stavropoulos, V., & Kannis-Dymand, L. (2022). Problematic gaming: The role of desire thinking, metacognition, and the proteus effect. *Behaviour & Information Technology, 42*(10), 1453–1465. <https://doi.org/10.1080/0144929x.2022.2081092>
- Cantrell, Y., & Zhu, X. A. (2022). Choice-based games and Resilience Building of gender nonconforming individuals: A phenomenological study. *Digital Transformation and Society, 1*(2), 198–218. <https://doi.org/10.1108/dts-08-2022-0039>
- Casale, S., Musicò, A., Gualtieri, N., & Fioravanti, G. (2022). Developing an intense player-avatar relationship and feeling disconnected by the physical body: A pathway towards internet gaming disorder for people reporting empty feelings? *Current Psychology, 42*(24), 20748–20756. <https://doi.org/10.1007/s12144-022-03186-9>
- Fraser, R., Slattery, J., & Yakovenko, I. (2023). Escaping through video games: Using your avatar to find meaning in life. *Computers in Human Behavior, 144*, 107756. <https://doi.org/10.1016/j.chb.2023.107756>

Green, R., Delfabbro, P. H., & King, D. L. (2021). Avatar identification and problematic gaming: The role of self-concept clarity. *Addictive Behaviors, 113*, 106694.

<https://doi.org/10.1016/j.addbeh.2020.106694>

Green, R., Delfabbro, P. H., & King, D. L. (2021). Player-avatar interactions in habitual and problematic gaming: A qualitative investigation. *Journal of Behavioral Addictions, 10*(2),

223–233. <https://doi.org/10.1556/2006.2021.00038>

Kang, H., & Kim, H. K. (2020). My avatar and the affirmed self: Psychological and persuasive implications of avatar customization. *Computers in Human Behavior, 112*, 106446.

<https://doi.org/10.1016/j.chb.2020.106446>

Kivijärvi, M., & Katila, S. (2021). Becoming a gamer: Performative construction of gendered gamer identities. *Games and Culture, 17*(3), 461–481.

<https://doi.org/10.1177/15554120211042260>

Korkeila, H., & Hamari, J. (2020). Avatar capital: The relationships between player orientation and their avatar's social, symbolic, economic and Cultural Capital. *Computers in Human*

Behavior, 102, 14–21. <https://doi.org/10.1016/j.chb.2019.07.036>

Kuss, D. J., Kristensen, A. M., Williams, A. J., & Lopez-Fernandez, O. (2022). To be or not to be a female gamer: A qualitative exploration of female gamer identity. *International*

Journal of Environmental Research and Public Health, 19(3), 1169.

<https://doi.org/10.3390/ijerph19031169>

- Loewen, M. G., Burris, C. T., & Nacke, L. E. (2021). Me, myself, and not-I: Self-discrepancy type predicts avatar creation style. *Frontiers in Psychology, 11*.
<https://doi.org/10.3389/fpsyg.2020.01902>
- Montag, C., Schivinski, B., & Pontes, H. M. (2021). Is the proposed distinction of gaming disorder into a predominantly online vs. offline form meaningful? Empirical evidence from a large German speaking gamer sample. *Addictive Behaviors Reports, 14*, 100391.
<https://doi.org/10.1016/j.abrep.2021.100391>
- Morgan, H., O'Donovan, A., Almeida, R., Lin, A., & Perry, Y. (2020). The role of the avatar in gaming for trans and gender diverse young people. *International Journal of Environmental Research and Public Health, 17*(22), 8617. <https://doi.org/10.3390/ijerph17228617>
- Müller, T., & Bonnaire, C. (2021). Intrapersonal and interpersonal emotion regulation and identity: A preliminary study of avatar identification and gaming in adolescents and young adults. *Psychiatry Research, 295*, 113627.
<https://doi.org/10.1016/j.psychres.2020.113627>
- Peck, T. C., & Gonzalez-Franco, M. (2021). Avatar embodiment. A standardized questionnaire. *Frontiers in Virtual Reality, 1*. <https://doi.org/10.3389/frvir.2020.575943>
- Raith, L., Bignill, J., Stavropoulos, V., Millear, P., Allen, A., Stallman, H. M., Mason, J., De Regt, T., Wood, A., & Kannis-Dymand, L. (2021). Massively multiplayer online games and well-being: A systematic literature review. *Frontiers in Psychology, 12*.
<https://doi.org/10.3389/fpsyg.2021.698799>

- Ratan, R., Beyea, D., Li, B. J., & Graciano, L. (2019). Avatar characteristics induce users' behavioral conformity with small-to-medium effect sizes: A meta-analysis of the proteus effect. *Media Psychology, 23*(5), 651–675.
<https://doi.org/10.1080/15213269.2019.1623698>
- Rivera, S. (2022). From battleground to playground: The video game avatar as transitional phenomenon for a transgender patient. *Journal of the American Psychoanalytic Association, 70*(3), 485–510. <https://doi.org/10.1177/00030651221104487>
- Servidio, R., Griffiths, M. D., Boca, S., & Demetrovics, Z. (2023). The serial mediation effects of Body Image-coping strategies and avatar-identification in the relationship between self-concept clarity and gaming disorder: A pilot study. *Addictive Behaviors Reports, 17*, 100482. <https://doi.org/10.1016/j.abrep.2023.100482>
- Stavropoulos, V., Ratan, R., & Lee, K. M. (2022). Editorial: User-avatar bond: Risk and opportunities in gaming and beyond. *Frontiers in Psychology, 13*.
<https://doi.org/10.3389/fpsyg.2022.923146>
- Szolin, K., Kuss, D. J., Nuyens, F. M., & Griffiths, M. D. (2023). “I am the character, the character is me”: A thematic analysis of the user-avatar relationship in Videogames. *Computers in Human Behavior, 143*, 107694. <https://doi.org/10.1016/j.chb.2023.107694>
- Szolin, K., Kuss, D., Nuyens, F., & Griffiths, M. (2022). Gaming disorder: A systematic review exploring the user-avatar relationship in Videogames. *Computers in Human Behavior, 128*, 107124. <https://doi.org/10.1016/j.chb.2021.107124>

Wang, H., Zhang, Z., Khalid, M. N., Iida, H., & Li, K. (2021). MMORPG evolution analysis from explorer and achiever perspectives: A case study using the Final Fantasy series.

Information, 12(6), 229. <https://doi.org/10.3390/info12060229>

Whitehouse, K., Hitchens, M., & Matthews, N. (2023). Trans* and gender diverse players: Avatars and gender-alignment. *Entertainment Computing*, 47, 100584.

<https://doi.org/10.1016/j.entcom.2023.100584>

Zhang, K., Deldari, E., Lu, Z., Yao, Y., & Zhao, Y. (2022). “It’s just part of me:” Understanding avatar diversity and self-presentation of people with disabilities in Social Virtual reality.

The 24th International ACM SIGACCESS Conference on Computers and Accessibility.