Choice-based Games and Resilience Building of Gender Non-conforming Individuals: An Exploratory Study

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Choice-based Games and Resilience Building of Gender Non-conforming Individuals: An
Exploratory Study

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Yuri Moran Cantrell
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ABSTRACT

Narrative-driven, choice-based games, games that allow gamers to make decisions regarding the game characters and storylines, can bring forth emotional changes in their players and offer empathy during scenarios that a player may not experience in real-world situations. Therefore, they can be used as tools to help with gender non-conforming (GNC) individuals’ resilience regarding their gender identities. Using a phenomenological approach with 12 in-depth interviews, this study explores GNC peoples’ game-playing experiences with choice-based games, especially how such experiences help them gain resilience and shape their gender identities. This paper identified eight gender- and resilience-related common themes within GNC people’s gaming experiences, including 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; 6) your actions have meaning; 7) building bonds; and 8) representation matters. The themes, patterns, and game features identified in this study may provide insight into potential resilience-building activities for GNC people. They may inform digital mental health interventions, information services, and game design practices.
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Chapter 1 Introduction

Gender non-conforming (GNC) individuals, defined in this study as individuals whose gender expressions do not meet cultural or social expectations, include transgender, non-binary, gender variant, gender diverse, genderqueer, genderfluid, agender, androgynous, bigender, pangender, or otherwise identify as other than the sex they were assigned at birth. GNC individuals feel that their gender development and stressful life experiences are tied to their gender identity and gender expression (Grossman et al., 2011). GNC young people are often at high risk for mental health difficulties such as anxiety, depression, suicidality, self-harm, and eating disorders (Connolly et al., 2016). Studies show that serious video games, games that focus on learning or health improvements, are useful interventions for young people suffering from depression due to gender identity stress (Strauss et al., 2019). However, not all people would have access to serious, therapeutical games. Choice-based games may enable GNC people to find their identity through storytelling aspects of gameplay, offering connection and belonging (Ruelos, 2018).

The nature of video games has changed significantly in the past decade, offering complexity, diversity, realism, and shedding light on social issues. Choice-based games, games that allow gamers to make decisions regarding the game characters and storylines, encompass choice matters, role-playing, and choose your own adventures. Casual games are typically created as a form of entertainment; however, with story immersion and narratives, choice-based games have the potential capacity to induce behavior changes, according to the theory of planned behavior, social cognitive theory, and self-determination theory (Lu et al., 2012). Narrative-driven, choice-based games can evoke emotional changes in their players, making them react or reflect on actions, and offer empathy during scenarios that a player may not experience in their real-world situations (Isbister, 2016). Using choice-based games, players are given the freedom to follow their preferred path or story. The interactive aspect of
these games offers deeper engagement than other forms of media and provides a space where stories may be personalized to reflect a player’s own values and wishes.

Gaining resilience within a controlled environment may be one of the only options for some GNC people regarding gender issues due to outside stressors. For example, a virtual game world may provide the space for a transgender woman the option to explore her gender identity without fear of outing herself directly. Therefore, this study seeks to explore and examine the potential benefits choice-based games may offer to GNC gamers in terms of self-exploration, mental health, stress coping, and resilience. The leading research question of this study is how GNC individuals experience resilience building through playing narrative-driven, choice-based games. More specifically,

RQ1: What effects do choice-based games have on coping and motivation with gender identity and gender exploration for GNC individuals?

RQ2: How do choice-based games influence how GNC people feel about their gender identities?

For this research project, the research questions were examined using a phenomenological approach. Phenomenology comes from the common meaning of lived experiences from groups of people with its purpose leading to describing the essence of that experience (Creswell, 2007, p. 159). The methodology is often used in game studies, and it is particularly suitable for this study because we want to learn and understand the experiences of GNC gamers from their own individual perspectives. This study also follows Ermi’s (2005) player-centered approach to understanding games through players and their act of playing, which has been an important area of game studies since the mid-2000s.

Exploring gaming and GNC experiences through in-depth interviews can fill a gap in the current literature on gaming culture and provide a deeper understanding of GNC participants’ experiences. This provides insight into their lives and through the expression of choice-based games by asking what was experienced in terms of gender identity, building resilience, and choice-based games and what situations participants had that affected their experiences with the phenomenon. The results will inform
us the values of game playing from the perspectives of the participants themselves. Findings from this study may assist information professionals with providing better services to consumers and GNC users. The information from this study may give researchers and game designers insight to patterns or content within games that are used are being used as resilience building activities. It may also open the conversation within the gaming industry, and society, on building equity, diversity, and inclusion from learning about GNC stories and experiences.

Chapter 2 provides a review of relevant literature that regards gaming and gender topics. The first section covers the three areas of game studies and a brief history of gaming research. Within game studies, it places a focus on gaming as artifacts, text versus the activity of gaming, and (the area the study places the most focus on is) the players experience and immersion within games. This section also goes into gradual inclusion of queer gamers into the gaming community and queer inclusive games with insight into queer play of games.

The following section covers Massively Multiplayer Online (MMO) games and single player experiences. Both offer different social experiences within their gaming environment and distinct ways a player may experience scenarios within games from the two types of gameplay. The next section investigates gaming and gamers’ gender identity. These topics cover concepts of world building, storytelling, and identity markers within games that can assist gamers’ exploration of themselves within a controlled environment. This section also covers different LGBTQ+ characters within games throughout the years and the impact certain ones had in the gaming community.

Narrative games and empathy are covered in the following section. These topics allow gamers to interact with a unique journey and thoughtful choices through understanding what others are going through. The moment during decision making must be perceived as meaningful and when a player feels empathy for a character or situation within a game, it can provide a unique impact on them which can alter their original intent within a game. The final portion covers games and health benefits. This goes
into the topics of gaming therapy that can assist with both physical and mental health and serious games that aid trans patients.

Chapter 3 describes the phenomenological methodology and my research design which is guided by Creswell’s (2007) text *Qualitative inquiry & research design: choosing among five approaches* and Moustakas’s (1994) *Phenomenological Research Methods*. The research question is stated here, which includes two specific questions that may give us deeper answers. This portion also includes the structure of data collection, participant criteria, data analysis, and the writeup of bracketing and the essence. The final chapters will provide the findings of this study, such as the themes and significant statements, with a discussion covering implications and applications at the end.
Chapter 2 Literature Review

There are several books and articles that cover the topic of game studies, gamers, queer games, and gaming for promoting health while content regarding the combination of gaming for health and trans people has been limited until very recently. This chapter will cover areas of game research, narrative and empathetic games, and recent information on trans health and resilience within literature. The first section will provide insight to the beginnings of game studies and its areas of focus, which will lead into the broadening of types of gamers and the types of experiences players may encounter. Cognitive, social, and psychological improvements through gaming are also explored later in this chapter, and the understanding of each aspect may offer a well-rounded perspective of the importance of this research study.

2.1. Game Studies and Gamers

2.1.1 From topic-centered to player-centered game studies

In the 1990s and 2000s, video games and game developers were targeted as the cause of violent cases in the United States. These claims originated from shootings related to the Columbine High School and unfortunate events involving car theft with policeman shootings in Alabama (Williams & Smith, 2007, p. 2). Articles and research during this time focused heavily on the negative effects gaming had on players such as “Video Games and Real-Life Aggression: Review of the Literature” by Dr. Lillian Bensley and Dr. Juliet Van Eenwyk (2001) and “Exposure to violent video games increases automatic aggressiveness” by Eric Uhlmann and Jane Swanson (2004). The study of gaming disorders also surfaced, focusing on the harmful and functional impairments gaming could cause due to lack of control and regulation of gaming (Carras et al., 2017).

Later, more neutral or positive studies of gaming were introduced and became known as “game studies,” offering treatment of its content similar to media studies, sociology, and cultural studies (Williams & Smith, 2007, p. 7). The shift in how gaming topics were handled altered the typical negative
bias that had been associated with video games and led research into a more detailed split between gaming as artifacts (Greenfield, 1994) or texts versus the activity of gaming (Walther, 2003). The differentiating between games and gaming offered a proper divide between those two, allowing researchers to focus on more specific and defined topics.

Laura Ermi (2005) further expanded on gaming areas by including player research. This area focused on a player’s experience and immersion within games. Ermi’s insights to gaming offered additional literature and academic research that reflected on how the differing areas of study complimented each other. A key theme she emphasized was to understand games through players and their act of playing (Ermi, 2005, p. 1):

... the essence of a game is rooted in its interactive nature, and there is no game without a player. The act of playing a game is where the rules embedded into game’s structure start operating, and its program code starts having an effect on cultural and social, as well as artistic and commercial realities. If we want to understand what a game is, we need to understand what happens in the act of playing, and we need to understand the player and the experience of gameplay.

The field of game studies encompasses many important areas, but Ermi’s (2005) player-centered approach has been influential. This thesis will also follow this approach.

2.1.2. Queer games and queer players

Recent books on gaming culture, including Queerness in Play (Harper et al., 2018), Gaming at the Edge: Sexuality and Gender at the Margins of Gamer Culture (Shaw, 2015), Rated M for Mature: Sex and Sexuality in Video Games (Wysocki, 2015), and Video Games have always been Queer (Ruberg, 2019), provide significant contributions in this area of research. In 2020, it was reported that there were over 2.69 billion people worldwide who played video games with an expected increase to three billion by 2023 (Gilbert, n.d.). The stereotype of a typical gamer no longer applies with such a broad reach of
the types of players. The increase of diversification of gaming culture has, however, hit some resistance over the years, impacting women and scholars within the gaming industry (Todd, 2015). Movements such as Gamergate in 2014 accented how racist, sexist, and discriminatory gaming culture could be, and journalist Leigh Alexander brought to the attention of game developers that “when you decline to create or curate a culture in your spaces, you’re responsible for what spawns in the vacuum” (Gray & Leonard, 2018).

In most games, heteronormative content is the standard (Ruberg, 2019). This mentality caused a toxic community of homophobic language in online gaming. However, more recent games expanded into queer expression and self-discovery that offers chances to explore gender, sexuality, and identity within a controlled space. A source of blossoming queer content is constantly developed by indie game developers such as Dys4ia (Anthropy, 2012). Though indie developers may have difficulty gaining visibility compared to triple-A studios, inclusive conventions and communities give them a space for games such as GaymerX (2021). GaymerX is a nonprofit organization that promotes representation in media and the gaming industry by offering panels and events at their conventions. The inclusive space also offers integrating LGBTQIA+ content at workplaces through queer-affirming training and workshops.

The word queer may mean something specific to each person, but the term “queer” or “queer play” for games means a game is played in a way that isn’t anticipated by the design (Rivers, 2019). Examples of this includes doing things other than the main task that would progress the game’s objective (Pugh, 2018). Situations like that allow freedom of choice on how the player decides to play the game. Games with a narrative structure typically grant interactive moments, giving more flexibility with how a player can guide their actions. With this perspective of gaming, this provides representation and a way to experience the game in a meaningful way to the player (Rivers, 2019).
2.2. Massively Multiplayer and Single-Player Experiences

One category that has several opportunities for non-normative signs in gameplay is online gaming, including MMO games and single player online games. This section describes the two different types of games and relevant literature.

2.2.1. Massively Multiplayer Experiences

MMO games reflect gaming culture in a unique way due to several players being able to interact with each other simultaneously. Some situations bring into question a player’s in-game rights or even the exchanging of digital goods, only useful within the specific game it is used in, with real currency that may go against the terms of service for a game (Williams & Smith, 2007, p. 18). Players may have multiple ways of communicating with each other through private chats, party chats, or even using emotes and animations (Stenros et al., 2009).

With the use of Massively Multiplayer Online Role-Playing Games (MMORPG), players are given opportunities to experience a unique narrative structure of gaming that makes it possible for each person to create their own goals within a virtual world (Eladhari & Lindley, 2004). To expand on this, each player creates an avatar that travels through scenarios of rich storytelling. These avatars may have self-characterization applied to them or, at the very least, represent the player that is controlling them. The MMORPG *Final Fantasy XIV* (FFXIV) casts the playable character as the hero of the realm and users can customize their physical appearance, the tone of their voice, and what types of clothes they wear (Ferguson, 2020).

Gamers also have opportunities to share interests and enjoy the long-term interactions within the gaming communities in the form of guilds (Lin & Sun, 2015). Guilds or Free Companies (FCs) bring players together for many reasons. Some gamers may want players to play the game with and have a shared experience, others use guilds to socialize. This goes beyond the simple act of interacting with another player to complete game objectives. The forming of guilds can be based on a common love of a
game or community, such as the LGBTQIA+ community. A FFXIV player with their FC tag near their name is displayed in Figure 1. The strongest component for successful guilds is the enjoyment of interactions between players, which promotes the shared interest (Pisan, 2007). Because of the impact of bonds between players and their shared experiences, some gamers may even prioritize that it is a community over the fact it is a game (Koster, 2014).

2.2.2. Single-Player Experiences

For players unable to or choosing not to play online and with large communities, single-player games can still be experienced across the globe yet the manner of the experience can be personal or intimate. Because most single player games have a linear storyline, even branching stories may still have a common theme, its players can share similar experiences despite playing solo. Despite the name of the type of game, single-player games may offer social dimensions that tend to be overlooked, both in and outside of the game (Stenros et al., 2009).

The act of playing a single-player game is for the benefit of oneself yet it is known that several other gamers are going through a similar experience. The use of social media can let other people know someone is playing the same game, and Steam, a video game digital distribution service by Valve, lets users announce when someone is playing any game associated with its service (Stenros et al., 2009). Another use of single-player games with a shared experience is through streaming gameplay done through Twitch or one of the several other streaming platforms (Deng et al., 2015). These services let gamers broadcast their screen while they play games with spectators able to communicate through chat. This occurrence creates user generated content and can offer specific experiences linked to a particular stream beyond the general experience of the content within a game.

One instance of a solo, shared experience is with a game that focuses on a coming-out story. The game Gone Home (2013) has the player navigate an empty house while investigating what had
Figure 1. Member of a LGBTQ+ Free Company in Final Fantasy XIV.
happened while Katie Greenbriar, the playable character of this story, was away overseas. The player can pick up and interact with objects, listen to different cassette tapes, or read through scattered notes throughout the home. The order of interactions a player may go in could differ from another person’s playthrough, but each player will understand the core story told through the game.

Though these scenarios only touch on two game categories, they briefly express a sense of being and their own unique experiences that shape an experience or identity of a gamer. Each player has their own play style, how they interact within a game, and what they can take from their instance. The examples displayed coming together for common interests, to mourn for the loss of an influential individual, and the ability to experience narrative games by oneself yet have shared actions or feelings. Humans are social creatures, wanting to share experiences and build bonds (McGonigal, 2011, p. 49). This thesis will take it further into lived experiences specific to how those positive experiences have been used to provide resilience in understanding or solidifying one’s gender identity.

2.3. Gaming and Gamers’ Gender Identity

Games have several diverse genres that offer players many outlets to explore and immerse themselves in different worlds and stories. The socio-technological aspect of games blend gamers and their relationships with others through digital interactions by providing a space for connection and growth (Ruelos, 2018). For some gamers, when real-world situations prevent self-exploration, worldmaking practices are implemented within games as a way to express how the gamer feels or wants to be. Worldmaking offers a chance for social change in a “what-if” scenario. Ruelos explores these instances with queer gamers to better understand sexuality and gender through a gamer’s identity. Through interviews, he identified three “game-playing experiences and affective connections: ‘worlding’ elements of games, the practices of storytelling, and the gamer’s own personal experiences” (Ruelos, 2018, p. 40).
The concept of Ruelos’ worlding stems from feminist science and technology studies literature “to draw our attention to the ways that worlds come together through collective action and how they attract, repel, enroll, animate, and incite us” (Kenney, 2013, p. 137). The worlds created from games provide a certain atmosphere that we are drawn to through emotion, sound, and appearance. A level of immersion may envelop gamers and provide a state of “flow” (Granic et al., 2014). Flow is a state where players encounter such a positive emotional state, it causes a feeling of high self-control while also experiencing a loss of self-consciousness.

Game narratives, storytelling practices in games, give players an opportunity to take in information, feel specific emotions, or experience content within a game as an intervention format (Birk et al., 2019). A brief example of this is of a main character having to go on a quest to overcome several challenges. Other aesthetic elements may contribute to a player’s unique experience and their own interpretation of the information they gained from the story and gameplay. The sound effects or background music, the art style of the environment and characters, and even the heads-up display (HUD) can set the tone for the type of overall experience gamers may encounter.

The last part of Ruelos’ (2018) game-playing experiences and affective connections is personal experience. The player can make a unique connection to a game through their own experience that may be reflective of a character, situation, or scenario. If a character within a game has a queer orientation, a player may feel relevant or have a bond to them. It becomes an identity marker. Bell et al. (2015) confirms through examining “how players’ intersectional subjectivities inform their experiences” of games.

Todd Harper (2018) examines the combination of games and queer theory as a playful and explorative space of possibility. He states “queer theory and games are a natural fit because, at the core, they work inside two highly complementary philosophical frames. The study of games, therefore, should similarly be approached with those frames in mind” (Harper, 2018). These spaces, in a way, give us a
safe place to explore and play with concepts of gender, sexuality, and identity. Both topics may also be viewed within debates regarding their nature and scope, what content applies to what categories, and how can certain boundaries be tested and expanded (Harper, 2018).

Some of the earliest mentions of LGBTQIA+ characters within video games came from Nintendo’s Mario franchise, Birdo, and Capcom’s Final Fight, Poison, in the late 1980s (MacKnight, 2013, p. 3), though their creation was not necessarily viewed in a positive light. Characters that strayed from a hetero-typical norm were assigned a villainous role, a non-playable character (NPC) or an oddity. Flea from Square Enix’s Chrono Trigger is an example of this type of earlier game development situation. Western developers would go to the extent of censoring gay, lesbian, or trans characters completely from a game when localizing content from Japan (Wysocki, 2015). However, more recent games have given depth to its digital representatives and leading roles ranging from Blizzard Entertainment’s Overwatch, Soldier: 76 and Tracer (Baggs, 2019), and Respawn Entertainment’s Apex Legends has a prominent non-binary character, Bloodhound (D’Orazio, 2021). When Apex Legends was confronted about Bloodhound’s gender, due to the voice actor for the character being a woman, they responded with multiple tweets to confirm that Bloodhound is non-binary as shown in Figure 2.

BioWare’s Dragon Age: Inquisition includes a transmasculine character, Krem. He is the first transgender character to make an appearance in a BioWare game, with Inquisition releasing in 2014, and has received mostly positive reception from the gaming community. Krem’s concept came as a necessity for being more than just having a genderqueer character within a game, serving a purpose that was respectful and reinforcing his place in the game’s story (Weekes, 2014). This includes a gender identity supportive secondary character, Iron Bull, who will speak to the player about transgender rights while standing up against negative remarks (Ruelos, 2018). The Dragon Age series offers several chances to explore different aspects of a game’s story, whether a major or minor role, by giving the player the freedom to choose how to react.
Figure 2. Screenshots of Apex Legends’ responses to questions of Bloodhound’s gender (D’Orazio, 2021).
One of the more recent additions of queer storytelling is brought forward through the eyes of a main character from Dontnod Entertainment’s *Tell Me Why* (2020). The game focuses on Alyson and Tyler Ronan, twins with an unfortunate history that slowly reveals itself as the game progresses. Tyler is a transman who shares recollections of memories and telepathy with his sister. The importance of this game stems from it being the first to feature a transgender character as a main character from a triple-A studio. The game developers consulted subject matter experts to ensure that the portrayal of minorities in the game would be viewed as authentic and respectful (Tell Me Why, 2020).

2.4. Narrative games and empathy

Games have the capability to let gamers “experience positive emotions, positive activity, positive experiences, and positive strengths” (McGonigal, 2011, p. 354). Not all games require in-depth stories to be enjoyable, but many players can appreciate a well-crafted tale that adds something more to their experience. Narrative-rich games weave stories and interesting characters that take the player on a journey through a digital environment. The content within them allows the user to feel a certain way, whether it’s happiness or anger, and can impact behavior or attitudes within both entertainment and serious games. To strike at the core of a gamer, game choices must be perceived as meaningful (Iten et al., 2018). When storytelling is done in a compelling way, it enables a player to personalize the game’s experience to their own values and wishes that goes beyond the scope a movie or other types of media could reach (Elson et al., 2014).

Choice-based and narrative driven games have given gamers the opportunity to explore situations and scenarios in a controlled environment. The game *Our Life: Beginnings & Always* (2021) has players shape themselves as the main character (MC). As the MC, players can choose their favorite foods, their favorite clothes, who to spend time with and even let other characters know what pronouns to use. If the player decides at the next chapter they no longer identify as he/him/his and want to change to she/her/hers then the other characters within the game acknowledge the change and address
the player accordingly. Depending on how the player navigates through the story, a companion may have a heart to heart and discover he identifies as asexual (GB Patch Games, 2021).

Other choice-based games may place a focus on interactivity, which is often studied in HCI games research (Iten et al., 2018). Crawford (2012) defines the interactive storytelling as the focus on the cyclic process between the player and the game as a system where good listening, speaking and thinking to have a good interaction. Unlike books or film, which are mainly passive experiences, games need active engagement from players to continue the story. The additional level of immersion offered for gamers allow them to identify as the hero or heroine of the narrative. Their decisions can shape how the story progresses or even how it will end.

Players are able to influence outcomes through their own efforts when given meaningful choices (Isbister, 2016). A story-rich indie game developed by Toby Fox, Undertale (2015), has the player make their own choices that affect how the game will play out. An interesting feature that isn’t as common in role-playing games is the fact that you can complete the game without killing any opponents (Steam, n.d.). Depending how the player interacts with encounters and characters will change future scenarios, such as becoming friends with an enemy or having to fight someone the main character may care for. Because of its interactive nature and heartfelt cast of characters, several gamers in the r/Undertale subreddit admitted they could not bring themselves to go through a branching story route called the “genocide run” due to being truly happy with the “true pacifist run” (RedditDrummar, 2015). In Figure 3 below, a player asked other Undertale gamers how the game ended on a genocide run due to not wanting to ruin their true pacifist run.

Gamers felt empathy for the opponents, and potential friends, to the point of making a sound choice of not pursuing a known route within the game. Another instance of feelings of camaraderie with in-game characters within a digital realm is with a game called Journey (2012). The silent venture through vast landscapes had gamers anonymously travel with other players while progressing to the
Spoil me! After the True Pacifist route, I can't bring myself to even attempt a Genocide Route. What happens?

I don't think I can do it. I'm playing the Switch version, and I've heard that a Genocide run will forever ruin a TP run. Is this true?!

What the hell goes on in a Genocide run, aside from the whole *kill everyone* stuff? What do we learn that isn't in the other routes?

I ask because I have just begun my new life as Ambassador of Monsters and Goatmama's precious child. And I honestly can't bring myself to mess that up permanently. That ending was too perfect.

So spoil me.

And let me know if a Switch Genocide can be undone?

*Figure 3. A Reddit post, stating the player cannot attempt Undertale’s genocide route (cooldash, 2018).*
completion of the story. The game design provided an emotional experience of exploration and discovery through a beautiful musical score and seemingly solitary play (Isbister, 2016). The playable character is clad in only a simple robe and scarf without customization capabilities, which places more of the focus on the environment and the adventure itself. Players are limited to how they can interact and may experiment how to help through their actions on the best way to help each other in the game. It’s a wordless collaboration that makes the experience unique.

Players may project themselves on a deeper level, when playing an avatar or created character, as they interact within a game because the character offers possibilities on several psychological levels: cognitive, how a player is rewarded through choices and outcomes; fantasy, explore alternate selves through the game; social, in-game social qualities that a user may not possess in the real world; and visceral, a player’s avatar as a vessel for action (Isbister, 2016). Freedom of choice offers a chance for a player to venture into unique scenarios for self-exploration that intertwines with the game’s story. J. Leighton Read and Stephen M. Shortell (2011) reinforce that entertainment games with well-developed design draw on narrative settings that motivate gamers towards goals, systems of feedback that range from points, levels, competition, teamwork, trading, and self-representative avatars create engaging ways for players to enhance psychomotor skills. Serious games potentially lessen the impact of enjoyment for players, especially when freedom of choice is limited (Poppelaars et al., 2018). This is an additional reason to pursue research into casual or entertainment games as another outlet for mental health gaming.

2.5. Games and Health Benefits

2.5.1. Gaming and mental health

Though the majority of games’ intended use is as a form of entertainment rather than being used specifically for mental, emotional, or physical health benefits, video games may still offer aid to players under certain situations. The health benefits of general game playing have been recognized by many
researchers through articles on the benefits of video game therapy to health conditions (Johnson et al., 2013; Carras et al., 2018). They can be used for therapeutical interventions or treatments for conditions such as anxiety and nausea in chemotherapy (Redd et al., 1987), attention deficit disorder (Pope and Palsson, 2001), autism (Blum-Dimaya et al. 2010; Gaylord-Ross et al., 1984), depression (Russoniello 2009; Russoniello et al., 2013), minimal brain damage and attention problems (Larose et al. 1990), posttraumatic stress disorder (Elliott et al., 2015), and more (Carras et al., 2018; Johnson et al., 2013).

This section focuses on the literature regarding gaming and mental health.

Mental illness has become recognized as a major disease burden with depression being the leading cause of disability around the world (Birk et al., 2019). Video games geared to help with mental health provided an innovative solution for individuals with limited resources or limited access to care (Birk et al., 2019). One field of research against depression is intervention-focused gaming. Intervention-focused game research views the appeal of motivation within games. Positive influences with gaming motivation have the potential to relieve pain and stress through self-determination (Przybylski et al., 2010). A pilot study from Carras et al. (2018) reviewed video games as therapy in different roles such as pain management, cognitive rehabilitation, social and communication skills, psychological well-being, and more.

Though there is clear evidence of the importance of games for health and several studies to validate this area of research, it is currently lacking in terminology except for serious games (Carras et al., 2018). Serious games are geared towards non-entertainment types such as healthcare and education. However, the combination of entertainment, casual games, and health are the aim of newer studies and research to allow a wider range of gamers to receive benefits from games meant for enjoyment.

Good behavioral situations occurred by playing games such as *Lemmings*. Players of the puzzle-platformer were more likely to help someone being harassed or that just had an accident (Bavelier et al.,
2013, p. 425). Although these scenarios are from simulated situations, they were able to convey a kinder side of human interaction compared to the default concept of player-versus-player instances. Further examples of gaming with positive effects can be traced back to a game called *Re-Mission* (2006). The purpose of this video game is to train aspects of behavior and brain function to combat depression through cognitive behavioral therapy, fighting off negative thoughts while playing in a fantasy world. The players are young cancer patients. Prior to the game, children with treatable leukemia were dying from treatment noncompliance. *Re-Mission* assisted with motivational psychology by creating an attempt to intervene with a measurable impact. The results from this game showed how positive behavior, and innovative game design, can affect mental and physical health while focusing on the well-being of vulnerable people (*Re-Mission*, n.d.).

Daphne Bavelier and Richard J. Davidson (2013) created a development outline for future gaming projects that should focus on the improvement of empathy and positive social interactions while decreasing anxiety and boosting attention. These areas include deciding what game components promote brain plasticity, foster collaboration between multidisciplinary programmes, academics bringing therapeutic games to the market, and develop standards for gameplay impact evaluation on brain and behavior that can enforce validity (Bavelier et al., 2013, p. 426). Bringing experts within specific fields, such as psychologists and programmers, can assist with the creation of therapeutic games while game developers have the experience to shape gameplay that can be enjoyable for users. This has the potential to foster enjoyment and a preference to continue playing games with health benefits. The overall goal of shifting the outcome of gaming, with these prerequisites in mind, is to also develop positive habits while gaming.

Another area of interest for mental health games is access to care for intervention programs (Granic et al., 2014). Users who need care may have difficulty accessing treatment programs due to their location such as hard-to-reach rural areas, are unavailable during treatment sessions due to work or
school or are unable to go to treatment locations because of a physical or psychological impairment. Mental health interventions in the form of games can reach these affected populations with little cost and effort. The cost is compared against the amount for individual or group therapy where it is not typically a high, recurring fee once the game is purchased.

Video games can implement specific motivational styles that can promote incremental intelligence (Granic et al., 2014). This is done by praising the player for their efforts and completing tasks, offering immediate feedback, and promoting the view of intelligence as something that can be achieved over time and with effort. Vygotsky (1978) calls this the “zone of proximal development” where users are in a motivational state that balances challenge and frustration with success and accomplishment. That unique blend urges players to continue accomplishing tasks and stay motivated through their process.

With the use of the zone of proximal development, players can better themselves in different areas of helpful behaviors such as social or civic movements through MMORPGs such as Guild Wars 2 (Granic et al., 2014). These positive effects have caught the attention of the medical field and gamifying medical interventions has been one of the priorities. The Games for Health Journal was created and calls for proposals for serious games that can make a large impact on the medical community (Kato, 2010). The objective of this is to spread awareness of the positive motivational pull video games have on patients that can improve their physical or mental health outcome.

2.5.2. Trans mental health

Strauss et al. (2019) provided thorough research on gender diverse individuals, young people at high risk for mental health difficulties, and mental health interventions with the use of games. The findings were significant and developed themes with subthemes: experiences contributing to mental health difficulties; online and digital supports and mental health coping strategies; face-to-face supports and mental health coping strategies; uncertainty about suitability and integrity of online resources;
preferred features of digital mental health intervention delivery; preferred timing of delivery of mental health intervention; aspects of games that are advantageous; and aspects of games that are unfavorable (Strauss et al., 2019). These themes were then broken down into subthemes based on comments made by participants in their interviews. This study found that gaming was feasible as a mental health intervention for coping strategies.

“Resilience is the capacity to cope with adversity, stress, and other negative events as well as the capacity to avoid psychological problems while experiencing difficult circumstances” (Luthar & Cicchetti, 2000; Grossman et al., 2011). Chavanduka et al. (2020) realized GNC people may experience discrimination around gender identity and created the Gender Minority Stress and Resilience (GMSR) model. The GMSR model distinguishes high levels of negative health outcomes experienced by transgender populations due to minority stress and other stressors such as substance abuse or bullying. Another model based on combating mental and physical health risks for trans people is the Transgender Resilience Intervention Model (TRIM) (Matsuno & Israel, 2018). The importance of resilience for GNC individuals strengthens aspects of their well-being in areas of self-esteem, social and emotional support as well as coping with difficult situations (Grossman et al., 2011).

The primary goal of the interventions is to lessen the mental health stressors that may be experienced in social areas that can victimize and marginalize trans people, and to create spaces of increased positive, and decreased negative, affect during identity development (Testa et al., 2014). By providing an additional, creative outlet for GNC individuals to explore their gender and themselves, these mental health interventions and resilience exercises have the potential to reinforce who they are and build confidence in their self-image.

2.6. Summary of Literature

Research on gaming and user experience of the general population has been abundant, but GNC individuals’ experiences had been largely overlooked until recent years. This includes how games have
the capability to assist with mental and physical health for GNC people. The high-level overview of how the LGBTQIA+ community was originally represented in games compared to more modern renderings of representation shows that some spaces within gaming circles are improving. In the inclusive spaces, this allows GNC people to explore themselves as they traverse a digital realm. Video games can foster growth, resilience, and meaningful connections as well as improve a person’s psychological well-being (Kowert, 2020).

Through the earlier mentions, games can build community through social spaces and have the capacity to promote positive change in both physical and mental health interventions. People come together through shared interests, which can include the bonding over similar experiences whether regarding GNC situations or a similar interest and hobby with overlapping GNC elements as a secondary shared experience. With the combination of narrative games, collaborative moments are formed and players can feel empathy towards others. This can create a more caring and understanding environment.
Chapter 3 Methodology

3.1. Overview of Phenomenological Research

The leading research question of this study is how GNC individuals experience resilience building through playing narrative-driven, choice-based games. The question was broken into two more specific questions: What effects do choice-based games have on coping and motivation with gender identity and gender exploration for GNC individuals and how do choice-based games influence how GNC people feel about their gender identities?

For this research project, the research questions were examined using a phenomenological approach. Phenomenology originates from the lived experiences from individuals. The purpose of phenomenology is to describe the experiences down to the point of the essence of that experience (Creswell, 2007, p. 159). Following the classic phenomenological approach, the researcher entered the study without any judgement or assumptions about the phenomenon. This is called a suspended discernment or an epoche (Creswell, 2007, p. 122). An example of an epoche is putting a hold on prior knowledge of what an object is, such as a gaming console. This allows the individual to view a console as objectively as possible. Viewing the gaming system with a blank slate, the researcher can explore and discover information about it without presuming anything beforehand.

The reasoning for this method is to understand common or shared experiences of GNC resilience building derived from choice-based games from participants. The goal is to find deeper understanding of this phenomenon by exploring what gaming experiences shape the identity of the participants. The researcher bracketed themself and their own experience through a reflective statement to document and understand the perspective and assessment.

Phenomenology is often used in game studies because each player has their own unique experience and exploring their experiences lets others know how it impacts their lives (Pak, 2018). This method focuses on examining those experiences to provide insight at the intersection of the gaming and
queer community. Similarly, this study uses phenomenological approach to understand common or shared experiences of GNC resilience building derived from choice-based games from participants. Because of the exploratory nature of a phenomenological approach, it enables the researcher to gain deeper understanding of this phenomenon by discovering what gaming experiences shape the identity of the participants.

Following the classic phenomenological approach, the researcher entered the study without any judgement or assumptions about a phenomenon (Moustakas, 1994, p. 85). They bracketed themselves and their own experience through a reflective statement to document and understand the perspective and assessment. This is called suspended discernment an epoche, meaning it is a clearing of the mind from any biases (Creswell, 2007, p. 122). Following the classic approach, this allows the researcher to view experiences and see what is there without preconceived ideas. This places a pause on things that may interfere with a fresh vision such as viewing statements with equal value rather than placing more weight to one over another (Moustakas, 1994, p. 115).

3.2. Phenomenological Research Steps

Clark Moustakas’s (1994) *Phenomenological Research Methods* represents the classic approach to phenomenological research. In this book, Moustakas outlines the phenomenological research methods as the following steps:

A phenomenological study begins with determining if the research problem is best examined by using a phenomenological approach. If the problem can be understood with this methodology, it will assist with viewing several common or shared experiences of a phenomenon. The study will then be able to develop policies, practices, and a more thorough understanding about the essence of a phenomenon (Moustakas, 1994, p. 58).

After the research problem has been verified that it is best examined using phenomenology, identifying the interest to study and describe it are the next steps. Emotional states and social
constructs can be viewed and described when a study occurs, whether a participant was feeling happiness or anger or held a sense of professionalism (Creswell, 2007, p. 128). Examples of described phenomenon are learning experiences such as first time driving a vehicle or becoming a parent.

Broad philosophical assumptions of phenomenology can be distinguished and specified at this point. The researcher must be able to bracket out their own experience to be able to completely describe how participants view the phenomenon. The lived experiences related to the phenomenon can then be made into a focal point and are considered “conscious” (Creswell, 2007, p. 128).

Data collection occurred in the form of in-depth and multiple interviews to record experiences of a phenomenon. The interviews were conducted with twelve participants, which was within the reasonable range that was stated by Polkinghorne (1989), and were collected from participants that experienced the phenomenon. Moustakas (1994) explained that two broad questions may be asked: What have you experienced in terms of the phenomenon? What contexts or situations have typically influenced or affected your experiences of the phenomenon? Additional open-ended questions were used, but the focus was mainly placed on the first two questions. Those two questions helped gather data for a textual and structural description of the experiences.

After the data was collected, the phenomenological data analysis began, and themes were generated from significant statements. Data was built from the two primary research questions and the significant statements were analyzed to provide an understanding of participants’ experiences with the phenomenon. This part of the process is called horizontalization (Creswell, 2007, p. 129). Clusters of meaning can were developed from the significant statements and were then made into themes.

The textural and structural descriptions were developed at this stage. Significant statements and themes were used to create the textural description by providing explanations of what participants experienced. When describing the context and setting that influenced how participants experienced the phenomenon, it is called a structural description or imaginative variation (Creswell, 2007, p. 61).
Near the end of phenomenology, reporting the essence of the phenomenon was done through a composite description. The researcher took the textural and structural descriptions to write a composite description that focused on the invariant structure, also called the essence. This report detailed all the common experiences described by participants. This assisted with finding the underlying structure.

The final step is presenting the report of the essence of the experience (Creswell, 2007, p. 129). There are a few different ways to communicate the phenomenological research. Some examples are through systematic exploration or a general report with an introduction that can inform the reader. The writing can include research procedures, philosophical assumptions, details about data collection and analysis, description of experienced phenomenon with significant statements, and a composite description of the essence with a conclusion.

3.3. Research Design and Procedure

This study largely follows Moustakas (1994)’s classic phenomenological research methods. This section describes the research procedures in detail.

3.3.1. The phenomenon

The study examines the GNC gamers’ experiences with resilience building through games. The researcher collected and analyzed gamers’ experiences through multiple interviews to find themes and discover essences. Understanding the common experiences of GNC games’ resilience can be valuable for researchers, game designers, teachers, therapists, health personnel, and others who may want to explore additional ways to promote services such as mental health wellness to GNC individuals.

3.3.2. Data collection

The population of the study was GNC people aged between 18 and 34, who have played choice-based games before the interviews and have had experiences with resilience regarding their gender identity through choice-based games. GNC people are those who may identify as trans (trans men, trans women, trans-masculine, or trans-feminine), non-binary, gender variant, gender-diverse, genderqueer,
genderfluid, agender, androgynous, bigender, pangender, or otherwise identify as other than the sex they were assigned at birth. The age range was 18 – 34 because certain age groups grew up with video games, and the highest percentage came from the 18 to 34 age demographic (Clement, 2021).

Before data collection occurred, the researcher received Institutional Review Board (IRB) approval (see appendix A for the consent statement). Upon IRB approval, the researcher started to recruit participants from online gaming communities, including gaming servers from Discord, Instagram, Twitter, Subreddits, and Facebook groups, by making public recruitment posts. The initial goal was to recruit 10 – 15 participants, hoping to reach data saturation within this range. Eventually, data saturation was achieved before reaching the max amount of participant interviews and the recruitment ended at 12 participants.

The study used semi-structured, in-depth interview methods to collect qualitative data, focusing on how the participants felt about their gaming experience with choice-based games. Each interview took 45-90 minutes. During each interview, the researcher first gained oral consent from the participant before the interviews occurred. Then the researcher engaged the participant in a conversation following a semi-structured interview protocol (see appendix C for the complete interview protocol). The interview had three parts:

1. Opening and questions about the participants life experiences.
2. Questions about the gamer’s experiences with choice-based games.
3. Closing, recap, and soliciting additional comments.

The interviews focused on what participants had experienced in terms of gender identity, building resilience, and choice-based games; and what situations participants had that affected their experiences with the phenomenon. Additional open-ended questions were asked; however, the emphasis was placed on the first two points.
The interviews were conducted online via Zoom and recorded in the Zoom app. After their lived experiences were recorded, the data was transcribed using Zoom or Otter.ai and then cleaned before analysis. Data cleaning removes or edits typos, duplicates, and incorrect formatting on text. Table 1 below shows the basic information about each participant.

3.3.3. Data analysis

The transcribed interview data was analyzed using NVivo, a qualitative data analysis software package. The researcher analyzed each interview transcript soon after the interview was conducted. Each interview was coded openly and sorted into a list of significant statements. The analysis focused on how participants were experiencing resilience and gender identity using choice-based games. All statements had equal value and was not prioritized as one being more important than another. This method is defined as horizontalization for viewing the data (Creswell, 2007, p. 159). The statements were sorted in a nonrepetitive and nonoverlapping manner. The refined list of significant statements was then grouped into clusters of meaning to form themes from the data. The data was then synthesized into 8 major themes found from the clusters of meaning. Reoccurring patterns and themes also became apparent but may not have included both gender identity and gaming as their primary focus. Because of that, they were not included in the major themes and were instead described individually as queer or gaming themes. These other patterns are included in the discussion section.

Textural descriptions were created based on what the participants experienced with resilience building and gender identity situations within choice-based games. The descriptions included examples from participants to further explain these situations and their context. This portion of data analysis was called the structural description or imaginative variation (Creswell, 2007, p. 61). Structural descriptions or imaginative variations were also written to describe the context or setting that influenced how participants went through their experience.
<table>
<thead>
<tr>
<th>Participants</th>
<th>Age</th>
<th>Gender</th>
<th>Pronouns</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>31</td>
<td>Transfem</td>
<td>they/them</td>
<td>VR company employee</td>
</tr>
<tr>
<td>P2</td>
<td>24</td>
<td>Non-binary</td>
<td>they/them</td>
<td>Digital Artist</td>
</tr>
<tr>
<td>P3</td>
<td>26</td>
<td>Non-binary</td>
<td>they/them</td>
<td>Resident Assistant</td>
</tr>
<tr>
<td>P4</td>
<td>24</td>
<td>Transmasc / Non-binary</td>
<td>they/them</td>
<td>Graduate Student</td>
</tr>
<tr>
<td>P5</td>
<td>34</td>
<td>Genderfluid / Transfem</td>
<td>she/they</td>
<td>Musician</td>
</tr>
<tr>
<td>P6</td>
<td>21</td>
<td>Transfem</td>
<td>she/her</td>
<td>College Student</td>
</tr>
<tr>
<td>P7</td>
<td>33</td>
<td>Non-binary</td>
<td>they/them</td>
<td>Graduate Student</td>
</tr>
<tr>
<td>P8</td>
<td>31</td>
<td>Transfem</td>
<td>she/her</td>
<td>Instructor</td>
</tr>
<tr>
<td>P9</td>
<td>25</td>
<td>Non-binary</td>
<td>he/they</td>
<td>Musician</td>
</tr>
<tr>
<td>P10</td>
<td>30</td>
<td>Genderfluid</td>
<td>they/them</td>
<td>N/A</td>
</tr>
<tr>
<td>P11</td>
<td>28</td>
<td>Transfem</td>
<td>she/her</td>
<td>Writer</td>
</tr>
<tr>
<td>P12</td>
<td>22</td>
<td>Transmasc</td>
<td>he/they</td>
<td>College Student</td>
</tr>
</tbody>
</table>

*Table 1: Participants demographics*
The initial reporting of the found essence of this study was created through a composite description. This was done by referencing back to the structural and textural descriptions that present the essence of this phenomenon. It focused on the common experiences of all participants. This type of description offers a reflective view of the phenomenon with clarity by combining these common themes that was more than just a re-telling of each participant’s experience.

3.3.4. Writing up

Essence

The participants who participated in this study all had experienced the phenomenon so the collected and analyzed data created a common understanding of the findings in written form. The practice of phenomenological inquiry is inseparable from the practice of writing (Creswell, 2007, p. 129). The format that was presented is a reporting structure that included an introduction to familiarize readers to the content and cases, personal statements of experiences from the researcher to bracket themself, research procedures to provide a rationale for the use of the method, philosophical assumptions with details about the data collection and analysis, a report of how resilience building through choice-based games was experienced with significant statements, and a conclusion with a description of the essence of this phenomenon.

Bracketing

Bracketing is part of phenomenology and provides background of the researcher’s experience. This allows the researcher to develop a non-judgmental and objective view of the study by embracing one’s subjectivity and reflecting on their engagement with data collection and analysis through their perspective. Bracketing provides chances for the researcher check if they are imposing biases or judgement.

To begin, I am a 32-year-old non-binary individual working toward a master’s in information science with a focus in user experience. I have a background in game design from Full Sail University and
have considered myself a gamer since I was a child. Because of my love of games, and preference to find the good in things, I pursued additional understanding of the gaming industry through education and positive games and events, such as Games For Change or the Pandemic Gaming Project.

As a GNC person, I can identify with the experiences of using games as a safe space to reflect or project my feelings on gender and identity and sexuality. In some ways, my experiences have overlap with participant experiences. However, I must maintain objectivity regarding the findings of the research through data collection and analysis and the write up. My understandings of gaming and the LGBTQIA+ community may offer me insight on terms, culture, and community. I do not know every aspect of the queer community nor know every detail of specific game genres. I find it important that I do not over-identify with participants based on shared background or assume their experiences are similar to my own.
Chapter 4 Findings

4.1. Findings

The research question for this study is how GNC individuals experience resilience building through playing narrative-driven, choice-based games. To gain a better understanding of this question, semi-structured interviews were conducted then analyzed through NVivo and sorted into a list of significant statements. Some examples of the significant statements and their meanings are shown in appendix D. That list of statements was then refined into clusters of meaning to form themes, including resonating experiences, character creation (as a form of gender exploration), exploration in a controlled environment, self-exploration and experimentation within games, games with positive inclusive features, storytelling, viewing experiences from different perspectives, branching options, your actions have meaning (agency), building character relationships (platonic or romantic) within games, representation within games matter, and strong connection between gaming and gender identity. Some themes that played a large part of participants’ experiences were having LGBTQ+ friends or allies, delayed self-exploration in life, recent exploration/reflection of gender identity, and receiving positive or adequate social and emotional support. These patterns were identified through gender identity experiences rather than the combination of gender identity and gaming. For games without strong connection to gender identity were being a young or early gamer, having regular family gaming involvement, and experiencing positive player interactions.

Some of these themes were then combined and refined. For example, branching options within games can be compared to the player’s actions to have meaning, finding a strong connection with games and gender identity also provides a resonating experience, self-exploration and experimentation in games encompasses exploration in controlled environments, and the point of view from a game character (within a narrative game) gives insight to a player’s involvement with the game’s story. The results of the refinement were: character creation, self-exploration and experimentation in games,
resonating experiences, positive inclusive features in games, storytelling and involving the player, your actions have meaning, building bonds, and representation matters. Below, Figure 4 displays these 8 themes.

Neary 50 different types of game titles were brought up during the interviews, showing the diverse gaming backgrounds the participants had. The game titles are in appendix E. 15 of those titles were mentioned multiple times and had stronger connections to participants and the research study topic compared to the other titles. The top title was Life is Strange, being an ideal example of a Choices Matter game. Life is Strange focuses on the story of Max, a young photography student who can rewind time. The game lets the player follow a queer narrative with another character, Chloe, if the player makes certain choices. The next three titles were Cyberpunk 2077, the Dragon Age series, and the Mass Effect series. These three are role-playing games with decision making moments that offer branching endings. They also place emphasis on character creation and romanceable characters.

4.2. Theme 1: Character Creation: Exploring Gender Identity Through an Avatar

All participants spoke of using character creation features in games such as Skyrim, Mass Effect, Dragon Age, and others to explore gender identity. This capability ventured into opportunities for using controlled environments to experiment and experience different scenarios and situations that they may not have had a chance to go through in the real world. Self-exploration gradually, or instantly for some, became a driving force of how they perceived a game and the events that occur within it. Having a degree of choice without consequence helped some gamers reach point of understanding their identity and being comfortable with who they are. Games that offered customization options, from physical appearance to decisions made to enrich storytelling, provided situations for players to intentionally make unique choices to shape how their characters can present themselves.

Participant 3 specifically used games to push the boundaries of gender expression and gender roles. If they created a masculine character, their choices would lean toward feminine actions. This
Figure 4. Refined themes from clusters of meaning.
playstyle swapped for them if they played a feminine character. They mentioned their actions were unintentional, and they realized this pattern only after they accepted their gender identity. These actions provided an outlet for this participant to present in androgynous ways, which appealed to them, and went beyond the normal expectations of what is expected of a man or woman.

Some games had gender-locked features, such as races in MMORPGs, or once you select one gender at the beginning, you cannot change it. Games, such as Final Fantasy XIV, have been gradually removing this by including additional gender options for previously gender-locked playable races or clothing that could only be worn based on a playable character’s selected gender. For gamers that identify as non-binary or genderfluid, having the freedom to choose what you want when you want it is important to them. For example, Participant 2 primarily focused on the character creation process of games they played. Animal Crossing was mentioned during our interview due to the lack of gender-locked options and freedom to change appearance or gender at any time within the game. The lack of consequences and ease of changing made it a simple process for them to go from one gender to another, depending on their preferences.

Participant 1 went into character creation with the intent to try something new that they wanted to explore and was unfamiliar with. They said,

I created a character and just from the get-go I decided this this character is going to look different. He’s different enough already, but he’s queer and he’s pansexual which are things that I was not at all familiar with on a personal level. Up until that point I only observed good friends and acquaintances living in that space. I had never experienced anything firsthand but playing as a character and settling into that character in that closed-off space, with open-minded people, helped me like realize this is actually a reflection of myself. And yeah, I realize my gender isn’t
congruent with the one that I’ve been identifying as my entire life. That’s what kind of really started it for me.

Although the customization feature typically initiated at the start of a game is not the primary focus for most games, certain types of gamers will spend most of their time in this one area. Others will even prioritize character customization and primarily use this portion of a game, choosing to return to the character creation feature despite having the ability to continue the pursuit of a main story within the game. Some participants mentioned spending a very long time crafting characters that they felt satisfied with without realizing how much time had passed by while they were working on them. This provided a state of flow during this specific part of gameplay. Several participants in this study were able to begin their journey of gender identity exploration using character customization and creation features that are included in several game genres such as RPGs, Choices Matter, MMOs, and Visual Novels.

One game, Cyberpunk 2077, offered an interesting take on the character creator by providing customizable genitals. This feature may not be an option for several other games due to its mature nature and rating restrictions placed on non-mature rated games. Figure 5 is a screenshot of the character creation screen with male and female appearing avatars. Several participants brought this game up specifically for this unique feature. Participant 2 commented:

... that's one of those games where you like you have full control over like how your character appears. You can like change the morphology of your face and your body, pretty exactly. I know that there was an interesting choice that the company made regarding your body presentation, your gender presentation, is that they didn't like no features of your body wherever gender locks. You could pick whatever you wanted. I know there's some in particular, like it was an interesting choice, that they've allowed you to customize your genitals as well.
Figure 5. Cyberpunk 2077 character creator.
Narrative-type games that incorporate the playable character into the story will address the character by using pronouns based on the selected gender – with some letting the player choose their pronouns without basing it on the selected sex of the character model. Some participants voiced that they were unaware that they would almost always choose the gender of the character they identified as. Their choice would gravitate towards what aligned best with them, and it wasn’t until they intentionally were exploring their gender identity did they connect the dots on their usual player choices. After becoming aware, exploration of different concepts was approached, such as what ways would best express themselves through an avatar. Participant 10 brought up that this form of gender exploration made it possible for them to genuinely figure themself out when they normally would not have been able to in the real world due to safety concerns. With the mention of exploration of gender with safety in mind, this leads into the next section that covers exploration and experimentation in games.

4.3. Theme 2: Self-Exploration and Experimentation in Games

Gender expression and experimentation, such as trying on different types of clothing, styling or cutting hair, or wearing nail polish, assisted over half of the participants in finding their identity outside of the binary. This was found in both virtual worlds and the real world. With the exploration of gender identity through these games, all participants spoke about their lived experiences and how this theme was valuable to their journey. Participant 12 expressed their perception as feeling strongly about exploration because identity is tied so deeply to them and everyone they know. Having games that allowed them to connect with different parts of themself was immensely important to them. They included that a large part of gender identity, and the discovery of one’s gender identity, was the process of experimentation. They believed having options that let players explore themselves in games was one of the most crucial areas where they found awareness of their identity – at that intersection of gaming and gender expression.
When Participant 1 was unsure of what pronouns they associated with themself, they would pick up a role-playing game and select a playable character. They tried female leads to test if being spoken to in a feminine sense felt right, then assumed the role of the female lead to play with those feelings. It gave them space to become aware of how they felt and reflect on that experience. This type of experimentation was applied to other games, such as *Hades*, for them if they wanted to explore the dynamics of platonic or romantic relationships with NPCs. Their experience was as though they were directly interacting with other characters rather than only involving the main character. They would then focus on how they felt about one NPC versus another to allow themself to consider their feelings on their gender identity and sexual orientation.

There was a sense of gratitude and satisfaction participants felt from being able to play a character that exhibited aspects they would like to see in themselves. Participant 7, who is non-binary, felt seen in a video game and had a sense of belonging there when they were able to play an androgynous character. They described it as “a way to be outside of myself” because they did not view themself as having an androgynous body type and playing a character that could present the way they wanted to be was their way to enter a world where they were not misgendered. This includes games that may not have a visible character or avatar but instead offer pronoun choices for a player.

The fear of being harmed or in danger in the real world if attempting to experiment with feelings around gender presentation brought some participants to virtual worlds. These game environments offered gender exploration in a safe place to assist with what felt right to the gamers. Some participants found that playing as a woman and being referred to as she/her/hers validated themselves through a game’s interactions and became more engaged with the game and story. Others could examine how they felt playing as a man versus playing as a woman versus playing an androgynous character and consider how it related to them.
With the combination of choice-based games, some participants would prioritize pushing the boundaries of gender roles and expectations. One non-binary interviewee, Participant 3, stated:

Any game where I get to play a cisgendered female character: what are the masculine traits that I can embody? Whenever I play [male] characters, what is one of the feminine traits that I can embody? Because, unfortunately, a lot of things are treated as binaries, or trinaries. Giving a good, bad, and neutral option. So, I kind of like to be able to push my own boundaries within games and use them as reflections of myself.

These aspects can be explored on a physical character model and through decision-making choices in games. Choices provide moments of reflection for players, such as how their character reacted to a scenario and how it may affect the playable character. Some of the actions through games were not used as the game intended, such as Participant 3’s experience, and provided moments of queer play for the players.

4.4. Theme 3: Resonating Experiences

Most participants began gaming early in their childhood, while some either were already in the industry or planned to advance their education to work on making games. Game immersion became part of several of their lives as they matured. Happiness could be heard through voices as memories of their first game or console were brought up, though a couple mentioned their first game was played through MS-DOS. Experiences that had a strong impact on participants overlapped with different themes. However, what made these unique yet in a common realm was that the participant would instantly light up as they spoke of their profound moment. It struck a chord within them and might have been their driving force at the intersection of being a gamer and a trans person.

Participant 5 shared her experience with games as being a haven for her to experiment and see how things worked out over time. Her game of choice was *Skyrim*, and she would focus on only making
specific types of choices to view how she would react to them. Once she started seeing how her choices affected the game, she would delete the character and start over from the beginning. Over time, she picked up on a pattern she was going through. She would create women to be her main character and seek companionship with other women in games. She reflected on her experience at that point and would ask herself, “Am I a boy? Am I a girl?” Games gave her the perspective that she needed to start exploring herself in the real world. She spoke of the confidence and reassurance gaming gave her that helped her realize she was not alone with her feelings of gender and expression.

The option to let the gamer present as a trans character, whether that be with pronouns or appearance or background information peppered into their story, despite any binary limitations was deeply appreciated by several participants. Testing these features within a game environment, a controlled space without judgment, helped participants become comfortable with who they were. Some reflected on their experiences of when they realized they were GNC while playing games such as Life is Strange or Dragon Age. Many expressed moments of either instant or gradual realization through main characters that represented the gender or presentation they themselves wanted.

Participant 1, instead, focused on receiving a unique perspective through multiple points of view from different narrative games. Games such as Detroit: Become Human resonated with the participant due to playing from multiple perspectives with three main characters. Each character brought a different background, a different need, and having to decide situations for them would “flavor questions differently” from understanding where they are coming from. The game has multiple endings, with the player’s choices determining what happens to the main characters and how their stories will conclude.

The same participant had strong feelings for NieR:Automata through learning more about the characters and feeling empathy for their plight and situation. The characters in this game were being used in a war and were considered dispensable. The participant considered what the characters were feeling during their journey despite that the characters were not human and did not encounter feelings
or emotions as we do. They considered their human experience of watching the events unfold and could view how their perception of things differed from what was perceived by the characters. They ended their recollection of the memory with: “… part of the message there is your experience, no matter what you’re going through, whatever you’re feeling, it’s valid. You have a place in the world. It just had such an impactful message.”

4.5. Theme 4: Positive Inclusive Features in Games

Games that participants enjoyed included positive inclusive features such as options for decision-making moments. Some participants brought up games that treated situations or characters part of the LGBTQ+ community as a normal addition to the story was another reason why they enjoyed the games they played. “My character [in Dreamfall] meets the person who owns the place, and she is lesbian who has a wife. She freely talks about her life. It’s a positive representation of a lesbian that’s not hypersexualized to my memory of it. It was so casual. Just normalized, entirely normalized.” Another brought up The Zero Escape games with its director, Kotaro Uchikoshi, creating queer characters and representing minorities in the series. Uchikoshi has even asked feedback from fans about the sexuality of a beloved character, with almost 65% answering that Snake from 9 Hours 9 Persons 9 Doors is gay (Uchikoshi, 2021).

With options for body type and pronoun selection, gamers were able to create or play as characters that may have bodies that do not match the assumed pronoun. Several participants expressed their views and feelings on their body image not reflecting how they believed it should be or how they would want it to be. This feeling can be reflected in a game when given the option, and most narrative games will honor the pronoun change and provide a positive experience with no misgendering such as Our Life: Beginnings & Always. Some virtual worlds carry a kind reminder that there should be respect for one’s identity and pronouns should not be assumed by the way a person physically appears.
Several participants enjoyed choice-based role-playing games that incorporated options to create androgynous characters or any queer appearances or relationships and dynamics with other players or NPCs. This included games that offer neutral pronouns, such as Monster Prom or The Arcana: A Mystic Romance. Though most games still provide a binary split between male or female at the start of a game, more recent games either do not list sex and provide body type options or offer flexibility with customization options to select features that are outside of a stereotypical or assumed male/female choice. Figure 6 displays the option for they/them pronouns for the player.

4.6. Theme 5: Storytelling and Involving the Player

The ability to view stories and situations from different perspectives was important to most participants in this study. Being able to play another character, regardless of their gender, offered moments of insight of the character’s situation and background. Participant 1 expressed their thoughts on understanding different situations through another point of view: “I think that’s a really valuable thing to try and do is to try and see things from other people’s perspectives. Try and keep the possibilities in mind. You never really know what someone’s going through – what their story is.”

To continue with this shared experience, other participants expressed that narrative games let themselves assume the perspective of characters that identified as genders outside of their assigned ones. It provided moments of empathy, experiencing emotions from a different view, and understanding how a story may unfold based on the playable character’s background or personality. This type of experience gave some participants moments to reflect on how they act because of their gender identity. Other participants solidified their feelings of validating their queerness through watching other queer characters in a game. Participant 6 spoke of their elation with the dynamic between Max and Chloe from Life is Strange. The journey of those two characters kept the player invested in the progression of the game and story.
Figure 6. Monster Prom character selection screen with pronoun options.
Storytelling was important to several participants as well as finding representation of diverse characters, whether it be through their background, culture, community, and so forth. Immersive storytelling was a key factor for Participant 7, mentioning that they feel more connected to a character and more likely to play the entirety of a game before focusing back on their large Steam library. The feeling of wanting to know more and venture further into a story was compared to reading a novel. Participant 4 expressed their interest in a blank or silent protagonist story: “I think it helps me have a deeper understanding of how I perceive gender. So, choices in certain games make the character I’m controlling a completely blank slate – you can project however you’d like on to them.” This self-inserted character type may immerse a player into the story as though they are truly a part of it.

Though games directly involving a trans or GNC character are very few, Participant 11 spoke of a game, *One Night, Hot Springs*, that focused a transwoman and how her story and different paths helped the participant understand herself on a deeper level when being unable to do so for two decades:

The story actually stars a 19-year-old living as a transwoman named Haru, being invited to a girls only hot springs trip. Haru is afraid to cause commotion or bother others, so she has isolated herself and is unable to begin the reassignment until her birthday at 20. I am still playing through the [games] myself, but the choices legitimately lead to completely different endings. In one, staying awake to talk to one character named Erika about being trans leads to a new friendship, and this helped me with a lot of phrasing and gave me a great view of the world. Saying no to Erika is an option and I was worried would be an isolative choice like choosing not to take a family bath. It instead led to Haru reconnecting with her childhood friend, Manami, who has always supported Haru’s transition but was wanting to know more of the pain Haru didn’t share about their earlier days. I am personally looking
forward to the full endings. I am also seeing it as a way to perfectly and subtly research myself in a way I have coped with for over 20 years now.

The participant was unable to have a similar experience as the main protagonist of *One Night, Hot Springs*, such as bonding with others or being open about her gender identity. She was concerned about her choices in the game and genuinely cared about how her actions would affect Erika or Manami. With these actions coming with resulting events or consequences, the next theme focuses on the player’s agency in games with their outcomes.

### 4.7. Theme 6: Your Actions Have Meaning

Actions having meaning within games and their stories played an essential role with participants. Choices in games offer a sense of agency that people may not truly have. Participant 6 shared that whenever they can choose and design a character, with a focus specifically on being able to choose their gender, they feel more connected with what their character does and feels. The experience does not feel like just a character they are controlling; it feels like they have a genuine voice in the world.

The ability to view the “what-ifs” of different moments and scenarios was important to some people. It gave gamers a space to try out one choice that they may have naturally would go within the real world. If they backtrack in the game and try the scenario again with another decision, it allows the player to experience a moment they would have missed otherwise. The appeal of having a say in something that directly affected the actions and outcome, even if it was not related to the primary story of a game, had some participants feel more connected to a game.

One more significant point Participant 7 made came from the concept of agency and having control over a virtual character compared to how the real world removes the certainty of control. There was a sense of not feeling that there was actual agency over their own life and compared it to a school
policy in some U.S. states that required students to be outed if they choose to use different pronouns. This takes away their choice of who to come out to and how they would come out, bringing its own issues of safety for the students. The same participant mentioned that playing games was their way to feel like they have more control in their life by having full agency over their character, moving their avatar to scenarios that they felt satisfied with. They believed that: “The more kinds of choices that you can offer to somebody, the more they feel like they have control over their life or their character’s life.”

Participant 8 placed emphasis on how her actions would cause characters in games to react to her. Her decisions in her choice of game, *Dragon Age II*, originally started as “knee jerk reaction choices” to play authentically as herself. She later realized that the outcomes of her playthroughs would end up with her character being in romantic situations with other female characters. With her results, she realized she was playing the game as the woman she wanted to really be. It was the catalyst that had her questioning her nature and initiated her gender and sexual orientation exploration.

**4.8. Theme 7: Building Bonds**

Most participants used gaming to explore their sexuality. Game features such as building character relationships, platonic or romantic, became a primary focus to some gamers. Games such as *Mass Effect*, *Dragon Age*, and *Fire Emblem: Three Houses* included characters woven into stories that had opportunities for dating, receiving gifts, or going through unique events depending on how the player would interact with them. Participant 3 shared: “... choosing my romantic partner regardless of my gender or their gender is a feeling of freedom of expression that isn't always offered to me in real life.”

Gaming solely as a woman protagonist was important to a few participants, some stating that they “basically play very few to no games that don't have female protagonists.” Their focus was on the romance or dynamics of women together and/or lesbian relationships. Any games that did not include or enhance that specific type of experience no longer held the attention of those participants. One
transwoman’s experience was that she did not consciously realize she was making those decisions about her play style until more recently. The realization solidified her feelings on gender and sexuality while for others, such as Participant 3, it gave them an opportunity to try different dynamics of relationship types by playing different genders and developing relationships with characters of various genders.

4.9. Theme 8: Representation Matters

This theme not only placed emphasis on trans representation but also encompasses underrepresented groups. With that in mind, there was a general desire for more inclusive features in games. Some participants spoke of their disappointment of triple-A studios lacking in representation and instead picked up indie games due to them not following a typical gaming industry pattern. The belief of one participant was that “having entertainment out there that explores these topics will be pivotal in helping some people discover themselves.”

One game that was both praised and criticized by participants was Cyberpunk 2077. In a previous section, the positive characteristics of the game were mentioned. However, participants also expressed their concerns about how representation was handled through the character creation feature: “I was really excited when Cyberpunk [2077] came out because I thought it was going to be this bastion of trans inclusion. In retrospect, I don't really like how they handled it. It's... it's there, but it's not really anything. Like, I guess that is the pinnacle of representation is when you can see a character, that is who you are, but it isn't like the be all and end all of who they are.” Others expressed their disappointment of no gender-neutral options in their representation.
Chapter 5 Discussion

5.1. Discussion Section

This research project asked questions about resilience building activities through choice-based games, focusing on the experiences of GNC individuals such as how the games influenced their gender identities and the effects the games had on coping and motivation. GNC gamers spoke of their experiences with gender identity and narrative driven games. Virtual worlds provided controlled environments for players to explore their identity, have agency in their world, and gain resonating experiences. The ability to customize or create their playable character, and other positive inclusive features, enriched their journey through immersive storytelling. Participants were able to view the connection with their gender identity resilience by gaming through these instances. It came to them through moments of better knowing themselves, affirming their identities, building relationships and communities, and finding inspiration through games. Coping and motivation came to them in several forms that solidified their resolve to live authentically with themselves.

All participants focused on Theme 1 (Character Creation) and this feature provided many appealing ways gamers could experiment and experience (Theme 2) their gender identity and expression through controlled environments. Ruelos’s (2018) review of spaces providing chances for growth through gaming placed value on queer gamers’ exploration of gender and sexuality within gaming realms. Character creation and customization with participants also focused on being able to project oneself onto the character to try alternate selves or experience qualities they may not have in the real world (Isbister, 2016). These themes were the most common that were experienced with the participants and offered the most activity in terms of gender identity and gender exploration. It assisted with forming a better understanding of their gender, and for some it allowed them to test and understand their sexuality.
For many participants, narrative games with interactive moments provided meaningful ways gaming was experienced (Rivers, 2019). This relates to Theme 5 (Storytelling and Involving the Player) and Theme 6 (Your Actions Have Meaning). Iten (2014) brought up that meaningful game choices may resonate with gamers. Those individual experiences offer moments of inspiration for the participants and created lasting memories of how they felt when their event happened. These relatable and empowering situations provided moments where the player could feel connected during a time when outside stressors may make them feel othered. With the themes in mind, the next section will consider the implications, applications that can be applied from the study, and other themes that were discovered that may need further investigation.

5.1.1. Gender and gaming

Choice-based video games, casual games, provide an additional platform for its users to experiment with gender aspects that helped affirm how they feel. If a GNC person does not have a safe space to explore themself in the real world, using narrative games offer a controlled area to explore parts of their identity they would not have been able to otherwise. This may give hope to a gamer by reinforcing motivation or coping with a restrictive environment where they cannot safely explore gender.

Features such as character creation, romanceable NPCs, or choices that provide character development opportunities assisted with shaping the gender exploration experience of the participants. The original intent of most games probably did not consider it to be used in this way, which reflects queer play and how gamers will interact with games to meet their own satisfaction with the virtual world. Gaming to experiment with gender, trying out gender-specific features that can change without consequences, and reflecting on their choices made in games gave GNC gamers a process to fulfill themselves with their gender journey.
Another prominent theme with the participants was delayed exploration and using games to explore gender identity. Some participants were under stressful or unsafe conditions such as living with family who were transphobic or did not consider exploring their gender identity until reaching adulthood. While gaming offers a controlled environment to experiment with gender and feelings, it can be experienced by any type of gamer at any age. This group of gamers had a similar experience of outside stressors preventing them from actively investigating themselves and used gaming, either intentionally or without realizing until reflecting on their actions, as an outlet for gender exploration.

Despite not being able to transition medically or socially at an earlier age, these gamers had unresolved questions about their identity and used video games to answer those questions. Some concluded that their birth gender was incongruent with how they felt while others discovered the fluidity of their gender identity. There were those who only found more questions rather than a definite answer but having a resource to safely explore themselves freely initiated their exploration of their authentic self.

5.1.2. Sexuality exploration in gaming

Several participants used gaming to not only explore their gender identity but also in combination with sexual orientation exploration. In some cases for participants, the primary objective of playing a game was to focus on in-game romance. Sexual orientation more than likely will change with the realization of one’s gender identity, and it is understandable how gaming exploration of oneself encompasses both topics. If a gamer lived as a heterosexual cisgender (meaning ones gender identity aligns with their birth gender) male then came to the realization that she is a transwoman who likes women, that would cause her sexual orientation to be homosexual. Using games that incorporate romance and dating may offer moments to play and explore with what a gamer likes or dislikes in relation to their identity.
In-game romance appears to be increasingly common, or at least a feature that is included in role-playing games, and can be found in triple-A studio and indie games. For trans gamers, older games such as the first few from *Harvest Moon* or *Rune Factory* only offered heterosexual relationships, which limited the experience for gamers who are bisexual or homosexual, but later developed same-sex options – which is also available in other titles such as *Dragon Age: Inquisition* or *Mass Effect 3*. Choice-based games offer identity exploration on a larger scale than only gender and is worth mentioning given the results of this study.

5.1.3. **Character creation features vs. choice-based features**

The main objective of this study was to explore what gaming experiences shaped the identity of the participants, specifically through choice-based games. The results of this display that actions, the sense of agency, and compelling narratives do offer a space for gender identity exploration and experimentation. However, the piece that tied all participants together in common experiences came from character creation features and the choices they made with their character in games. In any game that includes a character creation and customization portion, it is typically right at the beginning of the game. In terms of its use, it is minimal compared to the duration of the rest of a game with their stories, their gameplay, their end goals. Despite this and how briefly it is experienced, it was a driving force for how GNC gamers spent time to explore themselves. The avatar is something they will be stuck with for the remainder of their game, and it becomes a reflection of themselves in the game world.

It was important to the participants how they presented themselves in a virtual realm even though NPCs cannot truly judge their aesthetic choices or if playing online that other players might not have a clue as to who is controlling another character. Picking features and appearances is still choice driven, but the decisions are specifically about representation of the character a player is controlling. It is an extension of themselves and their actions, whether it comes from familiar themes they are comfortable with or experimenting with something new within themselves.
5.2. Applications

Understanding the common experiences of GNC games’ resilience can be valuable for researchers, game designers, teachers, therapists, health personnel, and others who may want to explore additional ways to promote services such as mental health wellness to GNC individuals. Confirming previous studies (Carras et al., 2018; Gilbey et al., 2020; Morgan et al., 2020; Ruelos, 2018; Schueller et al., 2019; Strauss et al., 2019), gaming with a focus on choices (especially character creation), can provide motivation and resilience building moments for gender identity exploration, which can be used for mental health benefits. This can offer an alternate solution for people with limited resources or for those who don’t know where to go. That may include GNC individuals who are unable to safely transition due to their circumstances. Exploring the topic of gender identity and using casual games for resilience building is important for opening the discussion on options and resources for users who want to discover themselves through entertainment. This branches into game designers becoming mindful of their audience and providing inclusive features in their games. It may also provide information professionals with better services and resources for GNC patrons and clients.

For transgender gamers, character creation features appear to be a good source for gender exploration. This can be used for people who are questioning their gender, are unable to safely explore themselves in the real world, or for experimenting with different physical features with no resulting consequences. Games can include options for non-binary representation such as not labeling a type male or female and simply display the options a player can cycle through and including they/them pronouns as a choice if the player will be referred to in-game.

5.3. Themes for further exploration

The analysis of interview data revealed some uncommon but interesting themes that may worth further exploration, including associating gender identity in gaming as a way to blend in, cultural differences with games and gender, avoiding certain games due to real world issues regarding game
developers, becoming a gamer later in life, and exploring gender identity through first exploring their autistic characteristics. These themes did not reach data saturation, but it would be worth investigating in the future through theoretical sampling.

A participant who is non-binary, leaning more masculine, spoke of their preference to choose male presenting characters for the sake of convenience with online play. They did not want to present feminine in any form within online gaming spaces due to potential risks associated with being a female presenting gamer. They were hyperaware of their situation in their teens, with how women in gaming are treated in a male-dominated space (during the time they began actively playing online) and decided that their choice in presentation was how they wanted to deal with the situation. The participant expressed they were never uncomfortable with their decision, having a male presenting character enhanced the validation of their gender identity, and it felt like a normal part of life to them.

A couple of participants explained unique situations of their own regarding social or cultural context related to gender identity and expression. One participant brought up that they come from an East Asian family and their mother would state, “Oh, it’s almost like I raised a son sometimes,” due to their personality and presentation. They were able to relate to characters in Japanese visual novels who were male. The options provided by those characters would have nice, indirect options or more direct responses to choose from and being able to see the variety and choosing an answer that reflected their personality while the response came from a male character aided them in feeling valid with their identity. Another experienced frustration with the new gender-neutral pronoun in French: “... what they did is sort of mash up, “il” and “elle” together, and use the same singular pronoun, but just mixed about so it goes like "iel" [sounds like “yell”] which in English is just... what is this?”

With the controversy of Activision Blizzard in 2021 and Riot Games in 2019, a participant had boycotted the companies. She was an avid fan of Overwatch and other first-person shooters (FPS) or multiplayer online battle arenas (MOBA), stating she was a loyal fan and spent years of her life playing
those games. The companies had lawsuits filed against them for gender discrimination, causing workers to feel less valued and overlooked with some situations going into extremes. Because of the issues surrounding these studios, this participant decided to discontinue spending time and money on their games and projects.

One participant did not consider themself a gamer until the more recent part of their life. Majority of participants experienced gaming and identified as a gamer as children, but this participant had certain factors that prevented them from obtaining consoles such as growing up in a poor area. This person received their consoles and games later as hand-me-down items from others. Their first few experiences with games weren’t necessarily enjoyable since the games they received from others were not from genres they enjoyed.

Another participant explored her gender identity by also examining her autistic characteristics, how they were similar or differed to others. She began her investigation of herself by listing things she felt she experienced that was different than neurotypical people and methodically viewed any incongruities with other autistic people as well. After a while, she considered what other areas may differ and focused on gender presentation. She didn’t associate herself as masculine and started as an androgynous presenting person at first. She used games to test out her feelings on gender and made comparisons on how characters appeared, such as the differences between *Dragon Age: Origins* versus *World of Warcraft*. She later realized she felt the most like herself as a woman who was interested in relationships with other women.

These moments were not experienced by every participant, but that does not make them any less significant. Some of these instances and themes may be experienced by many other people outside of this study’s sample. Because of the goal of this study, these themes were not further investigated, but learning more about these experiences may be important for understanding the diverse types of gamers and how decisions in games, such as the choices developers make that reflect on themselves as a
company or how cultural content alters a gamer’s interactions, affect the experience of its players. In addition to these other themes, exploring areas of gaming and gender through an expanded age range or through other spaces, such as at LGBTQ+ community centers or campuses, due to the research study’s limitation on age range and recruitment on online platforms may be beneficial for future studies.
Chapter 6 Conclusion

Resilience building can exist within virtual worlds that places emphasis on choice driven narratives for GNC gamers and improve their mental well-being. These experiences were told through GNC gamers who used casual games to explore their gender identity, ranging from titles such as Detroit: Become Human to The Witcher. Each theme provided insight to these shared experiences and how the participants achieved gender identity resilience through gaming.

Outside stressors may create difficult situations for GNC gamers and gender exploration can be unsafe in the environment around them. Games provide a space where a gamer can experiment and reflect on themself and their choices without the same consequences as the real world. Most games had a focus on a story that did not prioritize gender exploration yet it still occurred through the way GNC gamers interacted with the virtual world. This displays how queer play is an important and unique way gamers can explore and experience games that bring personal objectives into their interactions with their digital surroundings.

Online gaming and other forms of community events can provide opportunities for GNC gamers to feel a sense of togetherness. Playing single-player games, though they are typically experienced alone, can still be shared through word of mouth or on websites and be discussed with others who have also played. This may include discussing scenarios that had branching endings or who each player decided to romance in their separate gameplay sessions. Those choices may offer more masculine or more feminine themed decisions which gave chances for players to experiment with their identity and presentation.

The findings from this study are important for understanding GNC and queer gamers that may not have the means to explore their identities in the real world or would like to use a controlled space for experimentation. Further investigation into the ties between gaming and gender identity should be explored to gain additional insight to deeper questions such as other areas of gaming that provide a rich,
exploratory experience, how features such as having diverse characters and content in games enhance and promote inclusiveness for its minority gamers, and how positive games can bring mental health benefits. Current literature and research are limited on these topics and expanding this may lead games in entertainment, and public resources for gender variant people, into diverse and inclusive opportunities in the future.
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Appendix A: Consent for Research Participation

IRB NUMBER: UTK IRB-21-06679-XP

Research Study Title: Choice-based Games and Resilience Building of Gender Nonconforming Individuals: An Exploratory Study

Researcher(s): Yuri Cantrell, University of Tennessee, Knoxville
Xiaohua Zhu, University of Tennessee, Knoxville

We are asking you to be in this research study because you identify as gender non-conforming and have played choice-based games that helped motivate you or build up your confidence regarding your gender identity. You must be age 18 or older to participate in the study. The information in this consent form is to help you decide if you want to be in this research study. Please take your time reading this form and contact the researcher to ask questions if there is anything you do not understand.

Why is the research being done?
The purpose of the research study is to learn more about the lived experiences of gender variant gamers and how games with choice-based gameplay influence how GNC people feel about their gender identities.

What will I do in this study?
If you agree to be in this study, we will ask you to participate in one online interview. The interview will occur through video meeting software, Zoom, through the use of personal computers. The researcher will conduct the interview from their office space. The study will involve recording the audio of the interview with you and the researcher. You can skip any questions that you do not want to answer.

How long will I be in the research study?
If you agree to be in the study, your participation will be for one session that will last 45 – 90 minutes.

Can I say “No”?
Being in this study is up to you. You can say no now or leave the study later. Either way, your decision won’t affect your relationship with the researcher or the University of Tennessee.

What happens if I say “Yes” but change my mind later?
Even if you decide to be in the study now, you can change your mind and stop at any time. If you decide to stop before the study is completed, let the researcher know and any recorded data from our session will be destroyed. There will be no penalty for the withdrawal.

Are there any risks to me?
We don’t know of any risks to you from being in the study that are greater than the risks you encounter in everyday life.
Are there any benefits to me?
We do not expect you to benefit from being in this study. Your participation may help us to learn more about building resilience through gaming for gender variant individuals. We hope the knowledge gained from this study will benefit others in the future.

What will happen with the information collected for this study?
We will protect the confidentiality of your information by removing identifying information, such as your name, within the audio recording and transcription.

If information from this study is published or presented at scientific meetings, your name and other personal information will not be used.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information or what information came from you. Although it is unlikely, there are times when others may need to see the information we collect about you. These include:

- People at the University of Tennessee, Knoxville who oversee research to make sure it is conducted properly
- Government agencies (such as the Office for Human Research Protections in the U.S. Department of Health and Human Services), and others responsible for watching over the safety, effectiveness, and conduct of the research
- If a law or court requires us to share the information, we would have to follow that law or final court ruling

What will happen to my information after this study is over?
We will not keep your information to use for future research or other purposes. Your name and other information that can directly identify you will be kept secure and stored separately from your research data collected as part of the study. The audio recording will be erased once the transcriptions are checked for accuracy. Transcripts of the interview may be used for the data analysis portion of the study. Neither your name nor any identifying information will be used in presentations or publications resulting from the study.

What else do I need to know?
Number of research participants. About 15 people will take part in this study. This range allows us to reach data saturation with any information received.

Who can answer my questions about this research study?
If you have questions or concerns about this study, or have experienced a research related problem or injury, contact the researchers:

Yuri Cantrell
mkr358@mocs.utc.edu
(404) 618-1615

Xiaohua Zhu
xzhu12@utk.edu
(865) 974-5390
For questions or concerns about your rights or to speak with someone other than the research team about the study, please contact:

**Institutional Review Board**
The University of Tennessee, Knoxville
1534 White Avenue
Blount Hall, Room 408
Knoxville, TN 37996-1529
Phone: 865-974-7697
Email: utkirb@utk.edu

**Statement of Consent**
I have read this form, been given the chance to ask questions and have my questions answered. If I have more questions, I have been told who to contact. I understand that I am agreeing to be in this study. I can keep a copy of this consent information for future reference. If I do not want to be in this study, I do not need to do anything else.
Appendix B: Recruitment Script

My name is Yuri Cantrell. I am a graduate student at UTK in the MSIS program. I am conducting a research study on the lived experiences of gender variant individuals regarding choice-based games and building resilience.

Participation in this research includes a 45 – 90 minute interview that will explore your background with your gender identity and your experience with choice-based games. The interview will be conducted online and will be recorded. After the interview, I will transcribe the audio and delete the recording. Your identity as a participant will remain anonymous and any identifying markers will be removed from the study.

If you have any questions or would like to participate, please contact me at mkr358@mocs.utc.edu.

Thank you for your time,
Yuri Cantrell
The University of Tennessee, Knoxville
Graduate Student
Master of Information Science
Appendix C: Interview Protocol

Script prior to interview:
Hello, my name is Yuri Cantrell and I’ll be leading our interview today. Thank you for making time to speak with me for this study. This interview will take approximately 45-90 minutes. If you need to take a break or stop at any time, please let me know.

The questions in this interview will ask about your experience with gaming and background as a gender non-conforming person. There are no wrong answers to these questions. I’d like to record the interview, with your permission, and verify that you have reviewed the consent form. Do you have any questions?

Questions about life experiences:
- What was a moment that made you realize you were gender variant?
- What is your experience like so far with your gender identity?
- How do you feel in terms of social or emotional support regarding your identity?

Questions about the gamer’s experience:
- What got you into gaming?
- Can you recall a scenario from a choice-driven game that really resonated with you?
- Did any choice-based game(s) help you cope with certain situations or motivate you? If so, please tell me about this.

Closing, recap, and additional comments:
- In what ways do you find gaming connect with your gender identity?
- How have choice driven games made you feel about your gender identity?
- Is there anything else you’d like to include?
### Selected examples of significant statements from participants with gender identity + gaming and their meanings

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<thead>
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<th>Significant Statement</th>
<th>Meaning</th>
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<td>I always gravitated towards the character creation kind of games. I remember being really excited about the <em>Pokemon</em> games that came out in 2013 - 2014, X and Y, the first games where you were able to customize your character. Like, really? More-so than you ever could previously. And again, just having a variety [of options] and a variety of control over myself. It’s something that I really gravitated towards.</td>
<td>Character or avatar creation and customization offered gamers opportunities to present their main character in a way they were happy with. The ability to change their appearance gave a sense of control and satisfaction.</td>
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<td>I could examine how I felt playing as a man versus playing as a woman and consider how it related to me. I was happier and more engaged in games where I could play as a woman. Those games gave me a safe place to experiment with my feelings around gender and gender presentation. I was able to play as characters whose presentation matched my gender, and who were treated as my gender, when doing so wasn’t safe in real life.</td>
<td>Interacting as different types of characters and genders allowed gamers to ultimately decide what felt best for themselves. Virtual worlds offered controlled spaces to provide a safe environment for gamers to explore and experiment with their identity.</td>
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<td>I think where there either is a non-binary character or even just like any sort of queer character that I feel emotionally invested in, I want to see where the story takes them just like reading a novel. You know, I’d be more likely to play through the story for that character to see what happens to them even if I’m not playing that particular game at the time. Just more representation of stories about us and our lives matters to me.</td>
<td>A compelling narrative can pull gamers into a character’s journey where they may feel empathy and compassion. Inclusion of the LGBTQ+ community can provide perspective to the player.</td>
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<td>In <em>Tell Me Why</em> where one of the main protagonists, a trans man, Tyler, finds out about a gender conversion therapy his mother was going to send him too. It’s a really powerful moment in the story itself, but as a transwoman it felt like an actual kick in the face. It didn’t stop me from becoming who I’m becoming, it enhanced what I felt about myself.</td>
<td>Strong moment(s) in a game that resonates with the gamer. It reinforces how they feel about themselves.</td>
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<td>I’m sure that it’s not just my experience as a queer person, or as a genderqueer person, that sometimes we feel like we don’t really have agency over our own lives... It’s really easy to feel like you don’t have control over your own safety. One way to kind of escape that feeling of not having control is through playing games, where you have full agency over your character. The more kinds of choices that you can offer to somebody, the more they feel like they have control over their life or their character’s life.</td>
<td>The choices and control a player has are important. Digital spaces provide agency that a person may be lacking in the real world.</td>
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<td>I actually got that one [game] on my Switch, because it was on sale. It’s like, some sort of monster dating sim thing [<em>, Monster Prom</em>], and they let you pick up from a handful created monsters, but they let you choose your pronouns. And that just made me so happy when I started playing that game. Like, that was just something I did not know how much I wanted until I had it.</td>
<td>Inclusive options in games, such as pronoun choices, improve a player’s experience when they can connect to a feature that represents themselves.</td>
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*Table 2: Examples of Significant Statements and Their Meanings*
Appendix E: Games Title Identified through Interviews
Vita

Originally from Alabama, Yuri Moran Cantrell grew up in Moulton, Alabama and spent their summers in Okinawa, Japan. After high school, they attended the University of North Alabama before transferring to the Art Institute of Tennessee – Nashville to receive their Bachelor of Fine Arts in Media Arts & Animation. They worked as an illustrator before attending graduate school at Full Sail University to pursue a Master of Science degree in Game Design. This opened opportunities for them as an art producer and analyst, working on indie and serious games. They eventually gained employment at the University of Tennessee at Chattanooga and developed an interest in information sciences and user experience. This led into Yuri attending the University of Tennessee, Knoxville to pursue another degree, Master of Science in Information Sciences. After graduation, they want to continue and expand research in entertainment media and the queer community. They are thankful for the support from their spouse, friends, and professors as they finish their second Master degree.