## Empathy in Game Design - Exploring a Human-Centric Approach in Designing Engaging Video Game Experiences

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#### Abstract

The link between engagement and player emotions has been extensively explored by researchers in recent years. Empathy, which is the innate ability to accurately perceive another person's current feelings and meanings can be broadly categorized into two main human-centric design approaches cognitive empathy and affective empathy. Certain forms of media especially time-based media have been proven to better exploit viewers' empathy and provide a more engaging experience when a human-centric design approach is applied. The aim of this research paper is to explore if a humancentric design approach can provide the same level if not more immersive engagement when designing video game experiences. The initial research into a human-centric design approach in video games will be obtained through an exploratory research design involving six tertiary-level students in the field of game design between the ages of 20 to 24 over a period of two weeks. The exploratory research encompassing of a semi-structured interview process with eight key questions relating to the respondent's experience with empathy in games determined the advantages of planning and designing a game using a human-centric game design approach. The research determined that human-centric game design focusing on affective empathy provides a high possibility of a more engaging game experience that is strengthened by in-game narrative elements resulting in increased time spent ingame. This can be attributed to two main factors – firstly, a stronger player connection through direct empathy to their virtual avatars or in-game characters, regardless of the player's moral standings and principles. Secondly, an immersive narrative structure produces a deeper player attachment toward game characters and game worlds.

Keywords: emotions, narrative, affective empathy, immersive games, character attachment

#### INTRODUCTION

The video game industry has come a long way, with the global games industry estimated to reach \$300 Billion by the year 2022, with 2.9 billion active players worldwide (Wise, 2022). In less than half a century, video games have progressed from straightforward arcade games like Pac-Man and Donkey Kong to game containing advanced gameplay mechanics and photorealistic graphics quality like Red Dead Redemption and The Witcher 3. Due to the adaptation of various game platforms, particularly the currently ubiquitous smartphone technology, the video game industry has expanded in recent years. According to Statista (2022), the number of smartphone users worldwide has increased by a whopping 49.89% from 2017 to 2022. This translates to roughly 6.378 billion smartphone users and out of that, 63% of the world's total population use the internet. 92.4% of the demographics uses smartphones to go online (Digital, 2022). Games as a form of entertainment is one that is constantly evolving thanks to technology and society's adoption of technology. Smartphones have changed the behavior of gamers worldwide. With the added value of mobility instead of sitting in front of a static screen to play a game, smartphones allow mobile gamers to fit in their play time while multitasking or access content and games practically everywhere (Balakrishnan & Griffiths, 2019). This segment of mobile gamers also includes casual gamers, arguably one of the largest and fastest growing market in mobile games, accounting for 45% of all mobile game downloads (Koetsier, 2020; Moloco, 2021). It is easy to see why video games have become more and more accessible over the recent years. Witkowski (2020) states that the video game industry is now worth more than the global movie box office and North American sports combined. The game development industry is exploring alternate channels outside of mere content and technology to enhance user engagement considering this vastly lucrative market potential.

#### THE ROLE OF EMPATHY IN MEDIA

As the rate of video game content consumption has been steadily increasing, the need to meet these demands through the various aspects of game development should also increase in intensity particularly in the process and techniques of game design (Colby & Colby, 2019). This is to create more engaging and immersive video game content. Time-based media hold the most potential in the study of viewer immersion. Narrative fiction and storytelling in film creates an endless possibility for viewers to identify with central and peripheral characters to feel and care for these fictional actors on-screen be it to be captivated and moved by their tales, or by the expressed feelings the on-screen characters display in their voices, gestures, and facial expressions. All the emotions and the viewer's connection to the characters creates a connected interest in the audiences. This pervasive experience is a major part of cinematic storytelling as it determines the cinematographic, narrative, and emotional structure of time-based media to bring deeper viewer engagement (Tobón, 2019). Hence, in the field of video games – game designers must explore the rich aspects of narrative fiction, storytelling, and character development to build a higher level of player empathy for the game narrative. In fact, some researchers have begun to study the dynamics of the emotional state of players in user experience and using video games to explore empathy (Bachen, Hernández-Ramos, Raphael, and Waldron, 2016;

Bayrak, 2020). Bachen et al (2016) demonstrated the use of presence, flow, and character identification in the contribution to learning using empathy in a simulation game. Bayrak (2020) on the other hand, explored the application of human-centric approach in designing games to increase usability for players suffering from health conditions. While both these researchers explored the use of empathy in video games, it does not bear a resemblance in terms of building player engagement from an entertainment construct.

Empathy can be described as the capacity to perceive another person's thoughts and feelings in a circumstance from that person's perspective as opposed to your own (Depow, Francis & Inzlicht, 2021; Guo, 2022; van Zonneveld, Platje, de Sonneville, Van Goozen & Swaab, 2017). Jerrett, Howell, and Dansey (2021) describe as 'perspective-taking' or a complete understanding of another's feelings by stepping into the shoes of another person. Empathy can exist in multiple forms - from the ability to perceive or share another person's emotion (emotional process) to understanding another person's perspective (cognitive process); and to feel compassionate and wanting to lend a helping hand (motivational process) (Depow et al., 2021). Even though there are actually three different types of empathy, from the standpoint of game design, these are mainly divided into only two main forms cognitive empathy and affective (emotional) empathy. The capacity to adopt a mental perspective known as cognitive empathy enables one to comprehend and forecast the behavior of others, including their associated mental states (Guo, 2022; Jerrett, Howell, & Dansey, 2021; Johnson, Zhao, White, & Wickramasinghe, 2021; Pergerson, 2021; Yen, 2022;). In other words, possessing a cognitive comprehension of another person's sentiments in light of their present circumstances. A perfect example would be the notion that someone residing in a relatively peaceful country can only perceive at a surface or intellectual level, the horrors of hardship one experiences during a conflict having not actually experienced it first-hand themselves. The person may not be able to comprehend the full extent of emotions that a person living in a conflict zone goes through daily. In contrast, affective empathy is the capacity to grasp another person's feelings, such as their level of bliss or anger. It can be described as the spontaneous emotional response or the explicit emotional sharing of other people's experiences (Pergerson, 2021). An example being that one would be able to directly relate to another person whose pet has passed on if they have directly experienced a similar loss. The role and effects of empathy does not restrict itself solely in the domains of human behavior, human interaction, and human communication; but it plays a huge role in the field of entertainment. In the world of narrative storytelling, empathy can be a useful tool to help the viewers connect and engage with the fictional characters or worlds (Tobón, 2019). The desire of viewers to form relationships with fictional characters is a key component of film/narrative representations; when movies are seen in theatres, viewers form para-social links with characters and with one another while also experiencing a sense of community and a common shared experience (Grodal & Kramer, 2010). According to Lankoski (2007), art and emotions are intrinsically linked, and affective experiences are the fundamental building blocks of an experience. Viewers of periodic, fantasy, adventure, or drama series (for example - Game of Thrones) may experience a tinge of sadness or loss when a particularly attached character dies in the show or when the series takes a dramatic turn for better or worse. Even the world of social media is not exempted from the effects of empathy. According to Collins (2014), in comparison to people who contact with others online less regularly and use less Facebook features, those who use more Facebook features and engage in more frequent online interactions score higher on empathy tests. The implication of this is that social media engagement is partly influenced by the degree of empathy from its users. The central question that needs to be queried is this – can the same be said about video games?

#### THE ROLE OF EMPATHY IN VIDEO GAME

According to Lankoski (2007), anthropomorphic characters work better at evoking players' empathy. Star Fox, an arcade-style rail shooter and third-person action-adventure game series designed by Shigeru Miyamoto is a perfect example of this. This video game series by Nintendo follow the adventures of Fox McCloud and his anthropomorphic animal Star Fox battle team. According to Takaya Imamura, a key member of the star fox development team, the game was designed to make the player experience the tragedy of losing a close friend or wingman even though these were only solely anthropomorphic animal characters. Takaya Imamura states that, "It's pretty tragic when your allies are defeated, so players ought to realize at some point that they've begun to feel empathy towards them."

Anthropomorphic animal characters still resonate with us because these characters display behaviors resembling that of humans, making it simpler for people to relate to them because of the action's familiarity. This is primarily because humans are biologically predisposed to empathize with other human beings and these feelings sometimes occur without conscious intention. Fictional characters are able to evoke these feelings sense of empathy, simply by mimicking human-like tendencies and behavioral patterns. Edwards and Shafer (2022), explains that this is because "fictional or animated characters with minimal or no human appearance can inspire empathy if their movement sparks theory of mind interpretations of the characters' thoughts and feelings". Lewis, Weber, and Bowman (2008) suggested the attachment to anthropomorphic or and virtual in-game characters is significantly connected with playing time, particularly for role-playing games. The connection between relating with a character and experiencing empathy towards the character is based on the notion of character attachment. The longer the time spent with the attachment, the more emotionally vested one is towards that character. Apparently, this does not only apply with anthropomorphic or virtual characters but also towards specific in-game items as well. Watkins and Molesworth (2012) suggest that players tend to value digital possessions in-game due to the memories associated with through either the time spent acquiring the item or the amount of game hours spent utilizing the item in question. The use of empathy in game design can also be expanded further. Ziemke (2005) states that it is also possible for designers to ensure the players nurture identification or empathy toward allies and non-player characters (NPC). Due to players interactions with NPCs and their in-game actions, players may end up forming emotional attachments with NPCs according to Scriven (2022). This demonstrates a degree of participation that goes beyond a straightforward para-social connection. Along the way, players have been known to develop emotional ties with not only the characters they control but also with companion NPCs that go on adventures with them (Burgess, & Jones, 2020). Thus, it is apparent that empathy and character attachment is key to why players humanize non-playable videogame characters.

What role does empathy play in increasing player engagement in video games. Players' human connections are impacted by meaningful interactions with videogame characters, which blurs the lines between reality and in-game interaction as well as between humans and non-human characters (Coanda & Aupers, 2021). According to Tan (2019), one of the three basic elements necessary for a successful video game design is to have positive player engagement for sustained play. Therefore, this research paper intends to investigate to what level empathy plays in increasing player engagement in video games; and which are the most effective forms of empathy – affective or cognitive that enhances the overall player experience. The goal of this study is to give game designers some insight into how to use a human-centered game design approach to ramp up the impacts of empathy in games for higher player engagement through two research questions: (i) What are the benefits of designing a game through a human-centric game design approach? And (ii) How do we apply a human-centric approach to game design?

#### **RESEARCH METHODS**

This paper aims to examine the benefits of designing a game through a human-centric game design approach and its functional application in game design. The context of this research was geared towards respondents who plays narrative-heavy games in the adventure or role-playing game-based genres and are early practitioners of game design. Being early practitioners of game design allowed these respondents to identify with key concepts such as avatar, engagement, flow, and player experience. These respondents naturally fall under the age category of 20-24 years of age based on the criteria stated and are either loosely classified as semi-hardcore/casual or hardcore players who have been into playing games for more than five years. The advantages of creating a game utilizing a humancentric game design approach were determined by doing an exploratory research study that included a semi-structured interview procedure with eight essential questions linked to the respondent's experience with empathy in games. The interview technique made sure that each subject had the same stimulus in the hopes that the data they gave would show how the participants reacted to the different effects of empathy in games using a human-centered approach to game design. As with semi-structured interviews, the interview methodology permitted the participants to freely express their thoughts and experiences during the session. It was assumed and expected that the participants would all have similar levels of language ability even though the terminology they used might have slightly varied.

The definition of semi-hardcore/casual or hardcore players was determined by Knoll (2012), who stated that hardcore gamers are those that have played a lot of games, are willing to spend a lot of time and money playing games and prefer games that are difficult. While semi-hardcore or casual players show a willingness to just invest a little amount of time and money in gaming. Hardcore gamers demand that their games deliver captivating, thought-provoking, and entertaining experiences. (Hamari & Tuunanen, 2014). According to Kapalo, Dewar, Rupp, and Szalma (2015), there are six major criterion that defines hardcore gamers. Gamers are labelled as semi-hardcore or casual players if they did not meet at least five of these six requirements. These requirements are primarily based on time-investment and player spending (Howard, 2019). Generally, one is considered as a hardcore gamer if one should normally play for at least an hour or more in a single gaming session and clocked

at least two hours or more every day, at least three days a week, and at least 15 minutes per day researching either new games or exploring ways to further enhance their current game experience. They are also expected to at least own at least 20 digital or physical games which can be premium or spend an average RM80 (USD20) on in-app or microtransactions per month (Chua, Kainama, Adji, & Feranita, 2019); or within the past six months have obtained at least two new game titles (Kapalo et al., 2015). The semi-structured interviews were conducted in the month of July 2022 over a period of two weeks. For the purpose of enabling coding for narrative, recordings were verbatim transcribed with the participants' consent. In order to create emotionally engaging instructional games, the narrator's outputs were mapped onto a context. To avoid false conclusions being made towards the participants, all personal data which hints towards the participant's identity will be redacted. Participants are referred to by the alphabet 'P' followed by a running number '001' instead of their actual names.

|      | Types of<br>game<br>played    | Amount of<br>money Spent<br>per<br>month/per<br>year (micro-<br>transactions) | Amount of<br>money Spent per<br>month/per year<br>(premium/digital<br>downloads) | Games<br>owned in<br>Steam or<br>Mobile<br>phone<br>(purchased) | Length of<br>gameplay<br>per session | Hours of<br>game play<br>per day | Hours of<br>game play<br>per week |
|------|-------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------|----------------------------------|-----------------------------------|
| POO1 | FPS<br>Racing                 | RM100 p/m                                                                     | RM40 p/m                                                                         | Steam (123)<br>Mobile (10)                                      | 2-6 hours                            | 6-8 hours                        | 50-55<br>hours                    |
| P002 | FPS<br>RPG                    | RM60-100<br>p/m                                                               | RM100 - RM200<br>p/m                                                             | Steam (34)                                                      | 2-4 hours                            | 4-6 hours                        | 28 hours                          |
| P003 | FPS<br>RPG                    | RM50 p/m                                                                      | RM25 p/m                                                                         | Steam<br>(92)<br>Mobile<br>(2)                                  | 1-4 hours                            | 7 hours                          | 50 hours                          |
| P004 | MOBA<br>MMORPG<br>Action      | RM30 p/m                                                                      | RM85 p/m                                                                         | Steam (107)                                                     | 3-5 hours                            | 3-5 hours                        | 30 hours                          |
| P005 | MMO<br>RPG<br>Strategy        | RM300 p/m                                                                     | RM170 p/m                                                                        | Steam (132)                                                     | 6 hours                              | 6 hours                          | 40 Hours                          |
| P006 | RPG<br>Adventure<br>Narrative | Nil                                                                           | RM50 p/m                                                                         | Steam (40)                                                      | 2-3 hours                            | 4 hours                          | 28 hours                          |

Table 1: Demographics of interview respondents

Based on the demographic data, the respondents consist of four hardcore gamers, all of which fulfils the criteria of having played for at least an hour or more in a single gaming session and clocked at least two hours or more every day. They also have an average spend of RM80 per month. The other two respondents (P003, P006), while fulfilling the hours spent on playing the games, did not meet the requirements of the monthly spends as stipulated by Chua et al (2019) – thus, they are classified as semi-hardcore or casual gamers. Having said that – all the respondents do clock in at least 16% of their

week on games with an average 22.3% of the respondent's week time spend on video games. On average, normal Asian adults spend at least 30% of their week sleeping (Kim, Oh, Joo, Choi & Park. 2019).

Eight key interview questions were created and validated using a face validity procedure, in which a subject matter expert with in-depth knowledge of the subjects at hand and the methods used in qualitative research assessed whether the questions accurately captured the research being examined. The list of verified interview questions used in each interview session is provided below:

- i. Is there an especially memorable moment in gameplay where your felt strong emotions during a game-related event?
- ii. In games with very strong narrative elements, were you particularly attached to your player character or the non-player characters? What games were these?
- iii. How effective are video game narratives in reinforcing player's attachment to characters, NPCs, and the game environment?
- iv. Can you describe an instance when you felt angry or sad during the gameplay as a direct result of the game narrative either through the actions of NPCs or the world itself?
- v. Are there any movies that have given you similar emotional experiences?
- vi. Have you ever played a game in which you empathize with the enemy? Does that make the gameplay experience more engaging in any way?
- vii. Are there any games which feature non-human characters that you can relate to? What aspect makes them relatable?
- viii. Do you have any in-game items that you find particularly valuable from an emotional standpoint, outside of stats?

### FINDINGS AND DISCUSSIONS

In response to the first question, all respondents stated that they did experience strong emotions during gameplay especially when experiencing key in-game events. The most common answer, stated by three out of six participants, is that the more time they invest with the game, the more significant the impact they would feel in any game events involving their characters. P002 stated that she felt an emotional tug when an NPC who journeying with her throughout the entire game was suddenly killed. She described it as devastating. P004 used God of War as an example - he stated that because various perspectives of the father and son relationship has been explored in the span of the three games, it made him empathize with the characters and situation a lot better. Players experience deep feelings of emotions that are based on a key or significant event that occurs in-game whether it is something positive or negative. This is usually something that occurs when there is a significant time invested in the game. These feelings experienced can be classified as empathetic engagement. According to Lankoski (2011), the theory is that a player's interaction with game characters can be either goal-related or empathetic; the former occurs when the player takes action to achieve their goals, whereas the latter

occurs when the player responds to and feels recognition and alignment from the actions of other characters, much like in the movies.

In response to the second question, all the respondents stated that the close attachment they experienced for their game characters or NPCs was due to strong narrative components. P002 and P005 both agreed that they felt attached to their respective characters because of the time spent with them throughout the series, using Yakuza 2 and Final Fantasy as examples. Both these games have a very strong narrative component, especially Yakuza 2 which offers unquestionably one of the strongest stories in the entire game franchise, deeply exploring the unrest that the central character feels as he wants to give up his life of crime. Most of the games, that the players felt extremely attached to their characters are games that have renowned narrative structures. Final Fantasy for example has some of the greatest stories in the RPG genre. P005 remarked that the close attachment he had with his in-game character was because the game gave him the opportunity to feel as though the main character was a projection of himself in the game world. P001 stated something similar, citing Borderlands 2's customization system as the main contributor to her character attachment. She created a character like herself and that allowed her to 'project' her persona into the game character, thus making that avatar feel like an extension of her own. In a study conducted by Turkay and Kinzer (2015), research has shown that having customizability options increases a player's sense of agency, which encourages identification and empathy. Hence, it can be noted that players feel a close character attachment and prevailing sense of empathy towards their virtual persona due to engaging narrative that draws the players into the game world. Enhancing that effect can also achieved by allowing players to project their persona to their character, giving the players an opportunity to 'live' their fantasy. As stated by Coanda and Aupers (2021), meaningful interactions with videogame characters have an impact on players' human connections, blurring the barriers between reality and in-game engagements.

In response to the third question, all the respondents felt that narrative structure is key to reinforcing attachment to characters, NPCs and the game environment. Both P001 and P005 stated that compelling storylines and plot structures assisted in increasing their level of in-game immersion. Both said that this not only drew them into the game realm but also helped them form deeper attachments to NPC characters. So much so, that both players replay scenes or the whole game to reminisce about the world and the NPC characters. This is something that is termed as imaginative immersion where the player becomes captivated in the narrative structure of the game and the world, much like when avid readers are engrossed in a good book and sometimes re-read certain chapters or even the whole book. According to Emri and Mäyrä (2011) the factors that contribute to imaginative immersion are also apparent in the interaction design such as gameplay and mechanics; and the visual-aural design or the game which helps to engage all the sense. P003 added that for him, in a narrative-focused games, he felt that he would just play the game solely for the storyline and for his character progression in the whole game with little regard for gameplay or mechanics, thus highlighting the effectiveness of a strong narrative presence enhancing player attachment to their characters. As stated earlier, empathy and the connection between player and characters is critical in the world of narrative representations as it facilitates the players to get attached to and create an engaging relationship with the

fictional/virtual characters and/or game worlds. It is important to note, that like in all good storytelling, the key is empathy. According to Guo (2022), narrative storytelling in games is a persuasive method that typically inspires empathy, compassion, and sympathy. Schrier and Farber (2021) states that empathy is strongly linked to game narrative. Hence, it can be stated that the presence and application of empathy or a human-centric approach is a recommended requirement in narrative to design effective and engaging video game experiences.

All the respondents also agreed that the more in-game time investment spent equals to higher character attachments. Conversely, it can also be stated that due to an increased character attachment, a player can also spend more time on the game to level or progress the character. In other words, one may conclude that that focusing on nurturing empathy towards the player characters has the added advantage of making players spend more time in a game. In a study conducted by Johnson, Gardner and Sweetser (2016), the strongest predictor of hours of play in terms of the play experience was relatedness, also known as connectedness with others - in this case the game characters. The longer the time spent with the attachment, the more emotionally vested one is towards that character including time spent acquiring items such as rare weapons and armor or the amount of game hours spent utilizing the item in question (Watkins & Molesworth, 2012). Hence, empathy by itself requires some degree of time investment to fully realize its potential especially when tied to a narrative or gameplay component. Game designers should understand how the value of game hours and the momentum of game play in respect to narration. Video games presents incredibly immersive experiences that make the player feel very much involved in the game experience. The illusion of non-mediation between the player and the environment is known as by game designers as immersion, and it makes the player feel completely engaged in both the game and the narrative taking place there. According to Przybylski, Rigby and Ryan (2010), immersion can be sub-divided into three motivational forms - physical presence, which refers to the sensation of being in the game world; emotional presence, which refers to the perception that game events have real emotional weight and responses; and narrative presence, which refers to the sensation of having a personal investment and engagement with the story. The longer the perceived physical presence, the more likely the narrative presence can directly impact the emotional presence.

In response to questions four and five, when asked if the respondents felt any emotional impact when either the game or movie narrative was directed in a certain way or through the actions of NPCs or fringe characters – the replies were varied. All the respondents were able to specifically provide examples of movies that manage to capture similar emotional experiences with as with video games. An observable pattern emerged throughout all the respective responses, that is - movies and games do not have to present similar themes or settings to evoke the similar emotional responses from the audiences. P002 stated that the demise of her in-game character is the primary cause of sadness in the context of video games. However, in movies it is the strong visual facial expressions that brings the most pain. The statement provided by P005 contrasted with P002. P005 stated that although he was able to appreciate the visual imagery in movies, there was always a feeling of detachment from the central characters due to the lack of interactivity. It was like he was a mere spectator and thus could only view the events taking place. However, for most parts – all the respondents seem to agree that

movies and games provide comparable emotional experiences. P006 stated that she often gets very emotional in certain movie scenes but the emotions within the video game context is often tempered when it comes to the loading scene or during gameplay – video games have scattered cinematic scenes to bring forward a strong narration. The prevailing theory is that in video games, players can control the pacing of the events and narration, thus giving the players some degree of time and space to process emotions while in movies, events are happening in a seamless manner and are out of the viewer's control. This makes it easier for viewers to get easily overwhelmed by emotions. According to Zagal (2010), players may have agency when the game world time is stopped or paused but lose it when it is not. Hence, game designers should consider the possibility of pacing in gameplay when dealing with any human-centric approach in game design and game narration.

In response to question six, all respondents were able to pinpoint a specific villain in the game that they can empathize with, and unanimously agreed that it enhances the engagement they felt during the subsequent gameplay. P001 cited Need for Speed Heat as an example, where as a player, she empathized with the lower-level police officers who had no choice but to obey their corrupted leader's orders to earn a decent living, and that desire to help the police officers gave her a stronger encouragement to complete the game, hoping her actions would make an impact on the narrative. Lankoski (2011) juxtaposed this kind of scenario to the idea of allegiance in the context of film, asserting that the player's participation in a video game is goal-related as opposed to directly correlated with a player's opinion of a character's morality. The other respondents noted other ways that connecting with the adversary makes games more engaging, including providing in-game decisions that are more significance and making the game environment seem more realistic since characters' actions felt more humane. The reality is that this is the result of good narrative and in the context of games, where the narration may branch out and affect the whole outcome, the plot points become more pivotal.

In response to question seven, Five out of six respondents were able to think of in-game characters that can relate to the player. While this could be due to their human-like characteristics, giving anthropomorphic characters more personality and making these characters more relatable or likeable (Lankoski, 2007), P002 and P006 stated that physical characteristics did not have any significant impact on a character's relatability, it is more the gestures, voice, and personality. From the four anthropomorphic characters examples provided by the respondents, two of those characters, namely Pathfinder from Apex Legends and Caiatl from Destiny 2 could be classified as human-like; whereas the other two examples, Nameless King from Dark Souls and Omega from Final Fantasy are creatures with no resemblance to humans, the latter even being described in-game as 'interdimensional nonsense'. However, P002 also stated that non-human characters are not frequently encountered much in narrative-heavy games. Nonetheless, anthropomorphic characters have a better potential in inducing players' empathy as stated by Lankoski (2007). This is naturally because according to Gardner (2022), while people's level of empathy is not linked to species, it is most prevalent when people perceive a degree of helplessness and vulnerability. Given that animals need our care, assistance, and attention, this may also be connected to the human-animal link that many of us experience. Similar to how we

feel about our young offspring, people have a natural attachment for animals. This is primarily since animals are unable to easily help themselves, thus, most people have an impulsive need to care for them. Therefore, anthropomorphic characters relate so well with viewers in movies and players in video games. Coulson, Barnett, Ferguson and Gould (2012) echo this sentiment by stating that virtual characters elicit strong emotions, and as the realism of both graphical and psychological characteristics increases, game designers should also pay close attention to the utility of anthropomorphic characters as well as their look, and how both are viewed through the prism of player motivation and character.

In response to the last interview question, four out of six respondents stated that they had felt emotional connection to non-living objects in the game, namely items like weapons and armor. This was mostly due to the item's representation of a certain memory or player experience within the game. Both P001 and P005 mentioned the Keyblade from the Kingdom Hearts series as these objects signify a certain level of hope from a game narrative standpoint. P002 and P004 stated objects from games that serve as a memento for their video game journey. In the case of P002, P003, and P005, the items in question hold little value from a gameplay mechanics perspective; and from a purely strategic viewpoint, these items are merely a waste of in-game inventory space. However, these items do lead a certain in-game nostalgia and attachment to all three respondents. According to P003, the reason for this is mainly for emotional attachment. She explains that in the game Genshin Impact, there is a quest where there is a shrine maiden that asks for the player's help. This is basically a task where the player must sacrifice an NPC character but will earn the player a mask. The mask can be later upgraded into another item, but because of the significance of loss of an NPC character, P003 decided to keep the item as a keepsake of sorts. According to Watkins and Molesworth (2012), players tend to value digital possessions in-game due to the memories associated with it. These also can be linked to the item's rarity and stats. Hence, from a narrative point of view, empathy can also be linked to not only the player character, non-player characters, antagonist characters and game world events but also to ingame items that may be intrinsically linked to the player or gameplay.

#### CONCLUSION

Positive video game experiences and better player engagement through the application of humancentric design approaches potentially holds a lot of merit. Empathy obtained either through pivotal and intentional narrative buildups or purposeful character development, visual and aural representations and liberal use of anthropomorphic characters or items play a huge role in crafting immersive player experiences. The careful pacing of narration can impact the presence, flow, and character identification for players. The intentional application of empathy in game design allows for players to build relationships with fictional character(s) and the game world in order to form para-social links with the game characters and storylines. The game experience and the players emotions can inherently be associated as proven by the interview results. Although at a very preliminary stage and further research should be conducted but from a cursory outlook, the players affective experiences act as a fundamental building blocks of a positive game experience. The notion is that once empathy is prioritized in the game design process, a more engaging game experience can be achieved. According to Ike, Hoe, Kim and Y'ng (2021), using emotions to build immersion and engagement ensures a video game's most active impact on its players. Narrative elements in-game are also strengthened by designing games with consideration of the player's attachment to a character. Furthermore, time spent in-game increases as players get more attached to the game characters. The potential for video games to be effective as movies when it comes to eliciting an emotional response from their respective audiences is ever present and it is up to game designers to understand how to exploit human emotions to create a sense of engagement. Future research can help address some of this study's current limitations and support in strengthening and expanding on the study's current findings. This study looked at a broad spectrum of players and video games, with the only criteria for respondents being that they must be at least considered as a casual gamer. However, focusing on how different groups of players respond to a human-centric design approach in various video game genres would provide for better results. A larger pool of players could potentially provide a more in-depth understanding of how players empathize with certain game characters or the narrative structure of a particular game. While this research paper focused on what constitutes a human-centric game design approach, more specific research regarding the topics mentioned in this study can and should be explored for more accurate results. What is clear is that the use of empathy as a human-centric approach is critical in the design of engaging game experiences.

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