

# **The Formation of Projective Identity through Meaningful Choices in Digital Games**

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for my little angels who are in heaven, Angel, Jordan, Elena and Daniel  
I love you with all my heart, mind and soul

# Abstract

Many digital games allow players to play different characters, using different identities from their real world. There have been many studies on players' in-game identity, but these studies do not typically define what players' identity is. On the other hand, Gee analysed his experiences playing games and coined the term projective identity, an amalgamation of both players' and their in-game character identity. Nonetheless, there has been no empirical study on whether Gee's concept of projective identity held for other players as well. Thus, this PhD research investigates whether players form a projective identity in the games that they play.

The first study investigates how players formed their identity in their favourite game and found that players projected their identity through the meaningful choices that they made when they played. This discovery then led to the second study investigating how players enacted their meaningful choices and their rationale for making these choices in their favourite games. This study found that players' choice in the game are usually meaningful and personal to themselves as they can express their thoughts in action.

As players' game choice possibly shaped their meaningful choices in the game, the third study sought to investigate how players' choice of games can affect their projective identity. It discovered that when players could experience the motivation, context, sensibilities, expression and achievement aspects in fulfilling their game expectations, players could then declare that the chosen game was a favourite game to form their projective identity in the game.

With this empirical support for Gee's concept of projective identity, the PhD research has provided a solid foundation for future studies on in-game identity and how projective identity can be further developed in digital games.



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# Declaration

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References. Below is the publication that contained findings from this thesis:

- Jupit, A. J. R. and Cairns, P. (2014). Identity of Players in Digital Games. In: Poster session presented at the meeting of Seventh York Doctoral Symposium on Computer Science & Electronics.



# Abbreviations

<b>DotA</b>	Defense of the Ancients
<b>FPS</b>	First-Person Shooter
<b>HOG</b>	Hidden Object Game
<b>MMOG</b>	Massively Multiplayer Online Game
<b>MMORPG</b>	Massively Multiplayer Online Role-Playing Game
<b>MMOFPSs</b>	Massively Multiplayer Online First-Person Shooter Game
<b>MMORTS</b>	Massively Multiplayer Online Real-Time Strategy Game
<b>MMODG</b>	Massively Multiplayer Online Dance Game
<b>MOBA</b>	Multiplayer Online Battle Arena
<b>MUD</b>	Multi-User Dungeon, Multi-User Dimension or Multi-User Domain
<b>NPC</b>	Non-Playable Character
<b>OTS</b>	Over The Shelf
<b>PENS</b>	Personal Needs Satisfaction
<b>PvP</b>	Player versus Player
<b>RTS</b>	Real-Time Strategy
<b>RPG</b>	Role-Playing Game
<b>SDT</b>	Self-Determination Theory

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**TPS**      Third-Person Shooter

**WoW**      World of Warcraft

# Glossary

**action game** a game that focuses on physical challenges that include players' hand-eye coordination and their reaction time. 6

**adventure game** a game where players as the protagonist can explore the interactive storyline and solve puzzles. 6

**digital games** games that are played on electronic devices such as computers, mobile phones and tablets. 1

**first-person shooter (FPS)** a shooter game where players play in a first-person perspective, experiencing the game through the eyes of the protagonist. 6

**game genres** characteristic of games that describe how games are played or what players should do to achieve the goals in the game. 1

**grounded theory** a research method to help researchers explain the phenomena that was going on in the data collected. 10, 46, 56

**hidden object game (HOG)** a game where players need to find hidden items from a list that are hidden in a scene. 2

**identity** a sense of who the individuals are, how they see themselves, and their place of belonging in the world. 4

**level up** progress or advance to the next level. 149

**massively multiplayer online games (MMOG)** an online game with massive numbers of players playing on the same game server. 3

**meaningful choices** choices that are significant to individuals as the choices are an extended expression of themselves. 59

**non-playable character (NPC)** character in game that is not playable by any player but is controlled by the game's artificial intelligence. 2, 50, 64

**objective** the goals that players are expected to achieve or complete. 60

**Open world** players can explore the game world and freely make their quests instead of strictly following the main game quests. 50

**Player Experience of Need Satisfaction (PENS)** a model that consist of three psychological needs of players when they play games: competence, autonomy and relatedness. 22

**players** individuals who play digital games. 1

**post-game player commentary** a form of cued-retrospective think-aloud protocol where players talked about their actions and gameplay after having played the game with their recorded gameplay as the cueing material. 11, 86

**projective identity** players project their values and desires onto the game character with hopes that in time, the character would become what they wished it to be within the character's in-game limitation. 6

**puzzle game** a game that focuses on puzzle solving as its main gameplay activity. 6

**racing game** a game where players take part in a racing competition. 6

**real-time strategy game** a strategy game that allow all players to play simultaneously in real-time, as opposed to taking turns to play. 6

**real-time tactic game** a tactical war game that is played in real-time, focusing on tactical and operational aspects of warfare. 6

**role-playing game (RPG)** a game where players can assume the role of the character. 2

**saved point** a point in the game where players can save their progress. 112

**self** an individual's essential being distinctive from other people. 2

**self-determination theory (SDT)** a theory that explain individuals' development tendencies and basic psychological needs that motivate themselves and integrate their personalities. 5

**serious games** games that are designed for a serious purpose such as education, healthcare and marketing. 3

**stealth game** a game where players mainly uses stealth approach such as hiding and sneaking to avoid or overcome antagonists. 6

**thematic analysis** a research method to identify, analyse and write down themes formed within the data collected. 11, 86, 97

**third-person shooter (TPS)** a shooter game where players play in a third-person perspective, with the protagonist visible on the screen during gameplay. 47

**unlock** the ability to acquire previously unattained items, abilities and/or skills. 150

**wraith** a spirit of vengeance. 91



# Chapter 1

## Introduction

The digital games industry has become increasingly popular with players contributing £4.5 billion in revenue (Newzoo, 2018) to the United Kingdom (U.K.) alone. With 23.1 million players in the first quarter of 2018, many Great Britain players play digital games on their computers, consoles, handhelds, smartphones and tablets (GameTrack (ISFE/Ipsos Connect), 2018). According to Statista, some of the top-selling games included shooter, action, sports, role-playing and adventure games (Statista, 2018). These different game genres are conceived to describe how games are played or what players should do to achieve the goals in the game (Whalen, 2004). For example, a shooter is a game where the player proceeds through the main action of shooting enemies whether aliens, spaceships or soldiers whereas an adventure game usually proceeds through players deliberating over different actions they could take. I will discuss more on game genres in Chapter 2 (Section 2.3).

Games have evolved rapidly over the last few decades and have attracted players from diverse backgrounds. Players from ages of 6 to 64 have been playing packaged games that required physical devices like discs or cartridges, app games that are played on smartphones and tablets, and online games which include social and massively multiplayer games (GameTrack (ISFE/Ipsos Connect), 2018). As digital games have become more popular since the introduction of video games in the arcades, they have attracted both male and female players from a wide range of ages. The number of players has also increased over the years, with both physical and digital stores offering a myriad of games for players. The significant number of players has made studying game experience important as players can influence how the game may turn out to be (Rigby & Ryan, 2011; Gee, 2003b, 2003a, 2005b) and that game can also have an effect on the players themselves (Klimmt, Hefner, Vorderer, Roth & Blake, 2010; Van Looy, Courtois, De Vocht & De Marez, 2012; Gee, 2005b, 2008) through their identification with the game.

In games, players can master new challenges, have the freedom to choose their path and connect with other characters played by other players or non-playable character (NPC) (Rigby & Ryan, 2011). When players play games where they can assume a character, they can be different people or use different identities from who they are in the real world. For example, in the game *Gardenscapes*, players play as a new homeowner who has just inherited a large mansion. The players need to solve puzzles to earn enough coins to maintain the upkeep of the numerous gardens. Players can also reinvent themselves through character customisation in games by changing their character's gender, skin colour, age and many other attributes. Players can customise their characters to be different from their real selves (Lee & Hoadley, 2006), which is more evident in role-playing game (RPG). RPGs like *The Elder Scrolls* let players choose the appearance, gender, name and race for their in-game character. Moreover, players can also develop their characters' skills, strengths and personalities in specific directions as well.

A hidden object game (HOG) adventure game, *Criminal Case* allow players to design their avatar through gender, clothes, accessories, hairstyles and skin colour customisation. In *Criminal Case*, players play as a homicide detective whose task is to solve murder cases. In games where there are no visible characters like *Civilization Revolution*, at the beginning of the game, players can choose a famous leader from a notable historical civilisation, such as Julius Caesar who represents the Roman civilisation. Even though the character Julius Caesar is not visible throughout the game, players can build their Roman civilisation their way, expanding their territory as they see fit. Games such as *Civilization Revolution* and *Criminal Case* allow players to explore, construct and reconstruct their identities to play out aspects of the self, where they can build something or to be someone in the game (Turkle, 1994). Players can even enact out their identities after having constructed them to make games fun for themselves (Lee & Hoadley, 2006).

In online games such as massively-multiplayer online role-playing games (MMORPG), players are found to be motivated by three components: achievement, social and immersion (Yee, 2006). Motivated by their need to achieve in the MMORPG game, players desire to advance further in the game by gaining power or accumulate in-game points that can help them progress further in the game, in addition to understanding how the game works so that players could play better, and also to compete with other players in the game. As for the social component, players are interested in socialising with other players, forming meaningful relationships with them especially when they can benefit from working as a team in the game. Driven by their needs and wants to be immersed in the game, players want to discover more about the game, role-play as the character

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such that they can even create a background story on, customise their character through appearance and use it as a means to escape from their real-life problems even if for a little while.

In recent years, Hamari and Keronen (2017) investigated why players play games that are designed for leisure and instrumental use. Leisure games included those made for entertainment such as massively multiplayer online games (MMOG), mobile and social network games. Conversely, instrumental games referred to games used with a specific purpose other than for entertainment, such as in serious games and simulation games. Serious games are designed for serious purposes, such as in education where games are used to help children learn math in a game-like context. In simulation games such as a flight simulator, people can learn the actual skills for flying an aircraft, but in a game setting. Hamari and Keronen (2017) conducted a meta-analysis of 48 quantitative types of research in finding out why players play or use games. In their analysis, the authors found that players' attitude, enjoyment and their perception of usefulness, had strongly motivated them to play games (Hamari & Keronen, 2017). How players view and like the game playing experience makes up their attitudes towards playing the games. As for their enjoyment, players were motivated to play games when they know that they could enjoy themselves and be entertained during their gameplay. Players were also motivated to play when they could perceive that the game would be useful for them in the real world.

While there are players who are motivated to play games for many reasons including achievement, pure enjoyment and social play in games as outlined by Yee (2006), Lee and Hoadley (2006), Hamari and Keronen (2017), players are also known to play games where they can explore their identities. They are motivated to play in games where they can construct their identities through the avatars or characters (Olson, 2010). Identity being a motivation that also forms the experience of players in the game may be significant in how they can drive the gameplay. In turn, the game can affect themselves in both game and real worlds. In Olson (2010)'s study, many players who were school students are driven by social, emotional, and intellectual and expressive motivations when playing games (Olson, 2010). Socially motivated, these young players view playing games as an avenue for hanging out with their peers, competing with other players, teaching other players how to play and better themselves, making friends and also where they can lead others during the gameplay. Players are also emotionally motivated to play games where they can use games as an outlet for their feelings of anger and loneliness, and be absorbed within the game as well. Lastly, players are spurred on by the challenges presented in the game and the need to master them where they can also express their creativity while

mastering those challenges. They also experiment with different ideas of identities where they are curious to discover what they can learn from the game itself.

In psychology research, one of the early works on identity was carried out by Freud (1940/1969), where he developed the psychosexual theory that focused on the individual's birth until the adolescence stage. Since then, identity has been widely discussed by scholars, which resulted in the different aspects of identity such as ego identity (E. H. Erikson, 1959/1994a), actual, ideal and ought self (Higgins, 1987), similarity and wishful identification (Feilitzen & Linné, 1975), social identity (Tajfel & Turner, 2004) and altered self-perception (Hefner, Klimmt & Vorderer, 2007) to name a few. Although the works of Freud influenced Erikson, E. H. Erikson (1959/1994a) developed the ego identity to explain the psychosocial development of an individual, from infancy to adulthood. Young individuals build on their ego identity by identifying certain characteristics from those around them. Through this way, they can have a sense of who they are and their place in the world. With this sense of themselves, Higgins (1987) introduced the three domains of the individuals' self-state representations: actual, ideal and ought self. The actual self is how other people or we view ourselves with our traits, the ideal self is how we or others would like ourselves to ideally have our traits, and the ought self is how we or others think about the traits that we should have (Higgins, 1987).

The different types of self by Higgins coincide with Feilitzen and Linné (1975)'s work on children's identification with media character. The authors proposed that the children had similarity identification when they shared similar attributes with the media character (Feilitzen & Linné, 1975). Comparatively, the children possess wishful identification where they desire to be like the hero in the media (Feilitzen & Linné, 1975). In addition to the identity and self, group identity or otherwise known as social identity consisted of individuals defining themselves as belonging to a group identified as group membership (Tajfel & Turner, 2004). In their investigation for individuals' identification with a game character, Hefner et al. (2007) suggested that players experienced an altered self-perception where players reduce their self-discrepancy by identifying more with their ideal selves that they perceive in the characters. Even though the act of identification is not what identity is, researches in media and games suggested that individuals or players themselves have used identification with the character as a stepping stone to forming their identity (Cohen, 2001; Klimmt, Hefner & Vorderer, 2009; Van Looy, 2015). I will explain more on the definition of these different aspects of identity in Chapter 2.

The different definitions of identity could not be directly applied in games because their definition of identity is concerned about individuals themselves, without taking into account how playing experience could affect individuals. For example, the social

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identity comprises how individuals see themselves belonging to a group of individuals or not (Tajfel & Turner, 2004). Nevertheless, this social identity cannot be applied to the full extent in the context of games because not all games support multi-player mode, the crucial element needed for the social identity theory to be effective. There are players who prefer to play alone rather than in a group because single player games are to their liking.

Identity in psychology examines individuals' engagement with the real world through culture, economy, politics and society. How individuals think and act have consequences for themselves and those around them. Psychology researchers like Swann and Bosson (2010) suggested that the characteristics of individuals helped form their identity on who they are, which consequently make their selves distinct from others that were formed through their mental representation. The notion of identity established in psychology is complicated such that the researchers have investigated with such breadth and depth from different perspectives, resulting in multi-facets of identity (Vignoles, Schwartz & Luyckx, 2011). Identity in games, however, examines players' engagement within the game itself. Their choices and actions made can have consequences for themselves and other players (applicable in a multiplayer game) during the gameplay itself. Identity from the psychology discipline does not work in the context of games as there are not necessarily any consequences for players who are engaged with games.

Even though the concept of identity is complex to apply in games, identity researchers did lay down the fundamentals for identity formation of players in games. For example, Ryan and Deci (2000) developed the self-determination theory (SDT) to explain individuals' development tendencies and basic psychological needs that motivate themselves and integrate their personalities. Although not strictly identity itself when compared with the traditional meaning of identity in psychology, media and social science researches, SDT laid the groundwork for Luyckx, Goossens and Soenens (2006)'s work that support individuals' forming their identity. Additionally, the SDT was used to measure individuals' personal needs satisfaction (PENS) (Rigby & Ryan, 2011) in games. However, PENS seemed to be concerned with what players wanted to achieve in games based on their three needs: competence, autonomy and relatedness. The needs satisfaction did not elaborate much on how players form their identity in the game but instead focus on players' motivations, that is their self-determination through their gameplay in specific game genres.

There have been other studies on identity in game genres like shooter (Schneider, Lang, Shin & Bradley, 2004; Hitchens, Drachen & Richards, 2012), and massively multi-online role-playing game (Packer, 2014; Bessièrè, Seay & Kiesler, 2007; Van Looy

et al., 2012). However, the contribution from these studies is genre-specific and thus not applicable to players playing other game genres. Moreover, the notion of genres in game research is problematic as many of player identity studies that focussed on specific genres became irrelevant or not easily applied to the general population of players. I will explain more about the problematic use of genres in Chapter 2 (Section 2.3).

In their research on a first-person shooter (FPS) and racing game games, Klimmt et al. (2010) suggested that players experienced an altered self-perception when they identify with the game through the characters. In another first-person shooter game study, Schneider et al. (2004) suggested that players could identify with the character using measurement scales that was based on the use of the first-person pronoun. However, Hitchens et al. (2012) disagreed with the former's findings and claimed that players' usage of the first-person pronoun had no significant impact on players' identification with the game. These bodies of research on players' identity are divided on what players' identity is in games. Gee (2003a, 2005b) on the other hand, had given strong examples in his analysis on how players can form their identity but his theory is only based on his experiences and not of other players. Thus, in my thesis, I provide empirical support for Gee's work on whether players experienced the same projective identity as he did. In his work, Gee described projective identity as players who project their values and desires onto the game character with hopes that in time, the character would become what they wished it to be, within the character's in-game limitation (Gee, 2003a). I will explain more about projective identity in Chapter 2 (Section 2.5).

## 1.1 Research Motivation

In the research of players' identity, there have been many genre specific studies which are not applicable to other players playing games of different genres. Moreover, there was no consensus on how players formed their identity and what their identity was in games. Gee (2003a), on the other hand, had proposed a theory of players' identity that is in contrast with the accounts of both psychology and game identity community. He based his work on players' identity from his experiences playing games that he liked from different genres, given how much time he has spent playing those games. His tripartite work on identity, which are real-world identity, virtual identity and projective identity include games from the action game, adventure game, puzzle game, real-time strategy game, real-time tactic game, role-play and stealth game games. Through his work, he has attempted to define what players' identity is and how they form their identity in games.

Unlike many game identity researchers, Gee did not focus on specific game genres in his analysis on players' identity. Instead, he had analysed multiple game genres so that his theory on projective identity could be relevant for various game genres. Having said that, Gee did not provide any other empirical investigations apart from his experiences with the games. There was no evidence whether his projective identity held for other players as well. Thus, the aim of this thesis is to gather empirical support of Gee's concept of projective identity in games while deliberately not being constrained by genre.

## 1.2 Research Question

The main research question in this thesis is:

*Do players form a projective identity when they play digital games?*

What is missing from Gee's work is that there is no evidential support whether other players' identity reflects his projective identity. There is no indication whether the players form the same identity as Gee had when he played his games. Gee's idea of projective identity stemmed from his experiences playing games that he liked, which he chose for himself. Even though he did not outright mention whether the chosen games were his favourite ones or not, he seemed to have spent long hours in each game that he was able to examine how his projective identity unfold in the games. Players' choice of games, whether they were likeable or even their favourite one to play seemed crucial in forming their projective identity. Moreover, if players do really like playing their games, especially if it is in their favourite games, they could converse much on their experiences as they have fond memories playing them. Thus, this thesis focussed on studying players' projective identity in their favourite games.

To start the investigation, the first study, which is the identity formation study aimed to answer the study's research question:

How do players form their identity in games?

As the thesis seek to investigate whether players form a projective identity when they play digital games, this study first investigated how do players form their identity in games. This identity formation study found that players formed their identity through the meaningful choices that they made throughout their gameplay experience. Specifically, players projected their identity through their meaningful choices when they play. Hence, the identity formation study had provided empirical support in answering the thesis' main research question.

However, players' meaningful choices are only from their recounted experience, and thus it was unclear how their meaningful choices were manifested in active gameplay. To understand how players' meaningful choices are unfolded in their gameplay, the second study, which is the in-game choices study, seeks to answer these research questions:

- (a) What actions do players choose to make when they are engaged in a game?
- (b) Which of the actions made by players in the game are meaningful to them?
- (c) Why are the actions meaningful to the players when they play their game?

From the in-game choices study, there is the empirical support needed to solidify further Gee's concept of projective identity, not just as players' recounted experience but through their active gameplay as well. Players' projective identity seemed to be very present in their favourite games, which were their chosen games. Their chosen games appeared to affect their forming their projective identity as the first two studies comprised players sharing their experiences with their favourite games. With this basis in mind, the third and final study, which is the players' expectations study, aimed to answer this research question:

What are the mechanisms that make players choose a game worthy for them to make their meaningful choices in the game?

With the thesis' final research question, the players' expectations study have gained valuable insights on how players choose a specific game that would eventually become their favourite ones to play. Players expected that their expectations of self-expression and achievements in the chosen game to be fulfilled, which would then lead the game to be their favourite ones to play. Players could then form their projective identity by making meaningful choices in their favourite games.

## 1.3 Research Approach

A suitable research approach is needed to investigate whether players can form their projective identity when they play in games. Quantitative research methods employ measurement scales and conduct experiments that other researchers can repeat for validation (Adams, Lunt & Cairns, 2008). Using a quantitative approach could provide some insight into their identity, whether players can experience the same projective identity as Gee. However, there has been no instrument that can measure players' projective identity in games. The qualitative research approach, on the other hand, seek to understand a phenomenon and develop a theory that is grounded with qualitative data (Adams et al., 2008).

The thesis seeks to answer the main research question, which is whether players form Gee's concept of projective identity or not. Thus, to start the investigation, the thesis aims to study how players form their identity in games. With this question in mind, a qualitative approach would be more appropriate than using a quantitative method to gain insights on players' inner experience and how they can form their identity in the games (Corbin & Strauss, 2008).

Just as Gee had elaborated his experiences in games through projective identity, players' detailed experiences are essential to support Gee's theory. Moreover, the research question sought to explore Gee's concept of projective identity and its process of players forming their identity in games. Therefore, a qualitative approach is necessary for this PhD research to gather players' accounts on their experiences in games. The qualitative data comprised players' rich experiences of gameplay through recounted experience and recorded gameplay playing their favourite games.

Similarly, for the second and third study, a qualitative approach was used to help answer the research questions for each study. The second study seeks to investigate how players' meaningful choices in their formation of projective identity unfolded during gameplay. As the study aims to examine the process of how players go about choosing their actions, the qualitative approach would be more suitable for the study. For the third study, the thesis aims to investigate how players choose a game worthy for them to make their meaningful choices and consequently forming their projective identity in games. Just with the earlier two studies, the third study employed the qualitative approach to study the process of how players go about doing this.

This PhD research comprised three qualitative studies to help answer the main research question that seeks to find out whether players can form their projective identity in games. As I wanted to understand players' experiences, I decided to rely on their accounts of those experiences, much as Gee did on his account of his experiences. Thus,

I have opted primarily to collect verbal data through semi-structured interviews with the participants. In their study in evaluating technology as experience, McCarthy and Wright (2004) suggest that experience with technology does not end after engaging with technology. Instead, individuals' experience with technology can extend after the engagement where they can make sense of their experiences for themselves, their culture and lives, consequently making their experiences personal for themselves (McCarthy & Wright, 2004). From this perspective, using interviews for this PhD research seemed the most appropriate way to elicit data from players regarding their gameplay experiences.

## 1.4 Research Methodology

For the first study, grounded theory was used to investigate how players formed their projective identity in their favourite games (Chapter 3). The method was also employed in the third study to investigate how players chose a game that is worthy for them to make their meaningful choices (Chapter 5). Even though the grounded theory method was originally employed in social science, grounded theory has been used in other research areas such as educational policy (Anderson, Guerreiro & Smith, 2016), immersion in games (Brown & Cairns, 2004) and healthcare (Singh et al., 2018).

Grounded theory is especially useful for complex domains or phenomena where there is little known about the subject (Corbin & Strauss, 2008). The method does not necessitate a prior hypothesis to start the investigation (Corbin & Strauss, 2008). Moreover, grounded theory is suitable to develop a theory "that is empirically based and systematically developed" (Adams et al., 2008). In analysing the data, grounded theory comprises comparative methods in all stages, where its practitioners compare the data, codes and categories to build a theory, and after that the complete analysis with relevant literature (Charmaz, 2012). Also, theoretical sampling, which is the purposeful selection of participants as recommended in grounded theory, helped in building the theory through the refinement of the conceptual categories, thus giving the analysis an increased conceptual depth (Adams et al., 2008; Blandford, 2013).

As the first and third studies have considered questions of identity where the underlying experiences have not been previously examined, the second study seeks to investigate how players' meaningful choices were unfolded in their gameplay. Unlike the first and third study whose goals are to examine the hypothetical phenomenon of projective identity, the second study has already a known goal, in which players make their meaningful choices when they form their projective identity. However, it is not yet known how players go about making their meaningful choices during active gameplay.

Therefore, the thesis needs to employ another method aside from grounded theory to investigate players' projective identity in games further.

Although other qualitative methods like autoethnography have been used in human-computer interaction (HCI) domain (Rapp, 2018), autoethnography would not be suitable for this thesis as the method seek to describe and analyse the personal experience (*auto*) to understand the cultural experience (*ethno*) (Ellis, 2004), or in this thesis, players' identity in games. Using autoethnography for the study would only recount for my experience in games, just as what Gee did in his work for projective identity. As the thesis aimed to gather empirical data from other players to either support or contradict Gee's theory of projective identity, hence the use of autoethnography would not be suitable and beneficial for answering the research question of this thesis.

The discovery of meaningful choices in games from the first study led me to the next study, called the in-game choices study (Chapter 4). This study investigated how players' meaningful choices are unfolded during their gameplay. The method used in the in-game choices study was the post-game player commentary method, a form of a cued-retrospective think-aloud protocol (Gow, Cairns, Colton, Miller & Baumgarten, 2010). The cued-retrospective think-aloud protocol comprised players to think-aloud about their actions and experience during the playback of the recorded gameplay session. Instead of using a concurrent think-aloud protocol where players would be required to talk about their actions during gameplay, the post-game player commentary method would not distract the players from their gameplay, as it was not the norm for players to talk through their actions (Barr, Noble & Biddle, 2007). In a study comparing concurrent and retrospective verbal protocols in evaluating websites, Savva, Petrie and Power (2015) found that the retrospective verbal protocol would be more advantageous for research data even though the participants would need to spend more time and effort in their endeavours. Thus, using the cued-retrospective think-aloud protocol or specifically, the post-game player commentary would be more suitable for the in-game choices study.

In addition to using the post-game player commentary method for its data collection, the in-game choices study applied thematic analysis to analyse players' experiences to identify and analyse patterns of players' experiences (Braun & Clarke, 2006; Adams et al., 2008). Moreover, I used thematic analysis because I had a clear and specific focus on the phenomenon of meaningful choices, found in the previous study. The goal was not to develop a (further) possible theory but to gain insights into how (and to some extent whether) that theory appeared in the actual activities of players. With this goal in mind, thematic analysis is used to answer the main research question of the thesis.

## 1.5 Research Scope

This PhD thesis aims to gather empirical evidence of Gee's concept of projective identity in games while deliberately not being constrained by the problematic notion of genre. This thesis did not seek to define identity as it is beyond the scope of the research question. For many years, scholars from various fields have conducted numerous studies to define what identity is, how individuals form their identity, how their identity affects them in the past, present and future, and many more. Game identity scholars have also conducted various researches from many aspects and perspectives into players' identity with games, though quite commonly on players' identification with game characters. Nevertheless, they have yet to come to a consensus on what players' identity is supposed to be. As such, the thesis focussed on proving whether Gee's concept of projective identity holds for other players as to how he had claimed it to be.

The scope of the thesis also includes individuals who play games instead of individuals who have not played any game before. As players, their gaming experiences are vital to finding out how they can form their projective identity when they play. As Gee did not just focus on a single game genre in his analysis, this thesis has not as well. All conducted studies in the thesis comprise players who played games from various genres.

Just as Gee discussed games that he liked to play when he came up with the projective identity, this thesis will cover games that players like. Instead of just getting players to converse about games that they like, this PhD research recruits players to share about their experiences with their favourite games. When players talk about their favourite games, they can discuss at length of the memorable experiences that they have had over other games that they have played. These experiences will provide substantial accounts across a range of many players who play games from various genres and thus will provide a useful comparison set for seeing how Gee's concept of projective identity can work for players more generally.

## 1.6 Research Contributions

The previous section discussed the research scope that steered the direction of this thesis. This thesis focused on providing empirical evidence of Gee's concept of projective identity, specifically into how players can form their projective identity in their favourite games, how players make their choices when they play their favourite games and how players' choice of games can affect their projective identity. With that, the research contributions for this thesis are:

- Empirical support for projective identity. In particular, the projective identity

forms through the meaningful choices that players make when they play games. These meaningful choices are personal and reflect both the real world players and also the choice that the game forces on them and how they like to be as an in-game person. This theory is the essence of what is meant by projective identity.

- Choosing the game is complex and has not been previously studied. This thesis shows a theory that fits both with previous player motivations to play generally but how that gets tailored to focusing towards playing a specific game.

## 1.7 Ethical Statement

The research conducted in this thesis follows the University of York's Code of Practice on Research Integrity. As the university changed its ethical approval policy towards the later part of this research, the first two studies did not undergo the process of getting the approval from the Ethics Committee at the department level. However, the thesis supervisor had seen and approved of the study to avoid breaching of any ethical misconduct before the research was being carried out.

In all three studies, all of the participants recruited are above 18 years old, which is the adult age by law in the United Kingdom and Malaysia. Before the participants start the study, they were briefed on what the study is about and given a consent form. The participants are then asked to read and sign the consent form should they agree to participate in the study. The consent forms for each study are similar as they contain information about the background information of the study, what they would have to do in the study and who will see their data (see Appendix A, E, and H). Participants were also notified that they could stop the study at any time and have their data destroyed if they wanted. After having signed the consent form, participants are then asked to fill in the demographic questionnaire (see Appendix B).

The data collected from the studies are kept anonymous and confidential. Consent forms and demographic questionnaire are kept secure from unauthorised access. Audio data and transcripts from the interview sessions are also kept securely on a password-protected system. During analysis, participants were given codes instead of their real names in the spreadsheet used to collate all data.

In the in-game choices study, participants brought their favourite game to play to the lab. Although some of the games involved varying levels of criminal activity such as stealing and killing, these games are of the participants' choice and as such, are pivotal to the objective of the study. During the study, participants are seated comfortably with beverages for easy conversation flow. More importantly, participants were not in any

harm's way during the study.

## Chapter 2

# Literature Review

Many researchers have studied identity in the fields of psychology, media, social science and digital games. The many notions of identity were prompted by the different aspects of identity that individuals could construct in their everyday lives. For example, I have several identities: mother, daughter, student, *Fruit Ninja* and *Tomb Raider* player. In digital games, Turkle (1994) and Gee (2003a) suggested that players could have different identities other than their own when they play. They posited that their identities in the real world helped provide vast possibilities on how they could construct their selves in the game.

In this literature review chapter, I will first discuss the concept of self and identity used in the areas of psychology and social science. Next, I will then explain how identification in games can help players form their identity when they play. These explanation on the aspects of self, identity and identification are necessary to understand these terms used in psychology, media, social science and game researches. Identification research in games have mainly focussed on characters and as such, have examined players' identity and identification with characters in specific game genres, for example, RPG and shooter games. I will then explain these issues of researches using genres to highlight why using game genres are problematic when studying players' identity and identification in games.

Following that, I will review how literature has focussed studies on identity with in-game characters and avatars through character and avatar customisation, gender exploration and narrative settings. These studies have been very much led in game genres, which Gee have avoided in his analysis of projective identity. As the thesis aimed to answer whether players do form their projective identity when they play games, I will review Gee's work on projective identity to establish the grounds for addressing the research gap of his work. From this, it will be clear that while Gee's work provides a more general and robust notion of identity in digital games, it still lacks empirical support from

the perspective of the players' actual experiences.

## 2.1 Self and Identity

One of the early works in defining identity was by Freud (1940/1969) who theorised that a person's psyche is made up of the id, ego and superego. Based on his clinical works which focussed on the parent-child relationship, Freud theorised that these three parts that made up the individuals' personality are present in a person's life, which began from childhood through into adulthood. The id that was based on the pleasure principle focused on gaining the satisfaction of one's innate needs, such as one who would attain pleasure out of achieving something. As the person grows, the ego based on the realistic principle was developed out of the id as a result of the continual influence of the world surrounding him, which can also be seen as reason and common sense (Freud, 1923/1962). The last component of the psyche, is the superego that limits the satisfaction of the id, to behave in such a way that was learned from his parents, teachers and models in public life.

Influenced by Freud whose work focused on the theory of psychoanalysis, Erikson studied identities in children, parents and war veterans (E. H. Erikson, 1959/1994a). From his observation on children, he then formed the psychosocial developmental theory that spanned from infancy to late adulthood. Expanding Freud's theory of the ego, Erikson's theory of ego identity relates to the ego quality of the life of the person. The ego identity of the children builds more realistic self-esteem when they would be confident to walk, having mastered the physical skill and what it meant, deriving pleasure and recognition from those around them. Although this may appear to be narcissism in the eyes of the children, this self-esteem becomes a stepping-stone towards a future where the ego identity becomes more defined within social reality. The children, in their development stages, form their identity by identifying certain characteristics with their parents and other people (E. H. Erikson, 1959/1994a). The ego identity only becomes truly stronger when the child receives wholehearted and consistent recognition for achievement that has meaning in his culture. In a sense, identity suggests a persistent sameness within the self (selfsameness) with the persistent recognition from others on the self's sameness through time (E. H. Erikson, 1959/1994a).

The concept of sameness can also be seen in the traditional meaning of identity where it comprises of "an all-inclusive sameness, seamless, without internal differentiation" (Hall, 2000). However, Hall (2000) believed that identities are formed through differences. Through differences, a person is obliged to assume an identity, even though knowing that

said identity is just a representation, which is constructed across a division, differently from others. This interpretation then means identity is not identical to the person who is invested in it.

Another concept of identity, personal identity, has lacked consensus among scholars on what it means. On the one hand, it is a self with peculiar traits and fostering close personal relationships either through a unique set of attributes or interpersonal relationships (Tajfel and Turner, 1979 (referenced in Hogg and Vaughan (2011))). On the other hand, it is a mere fact of existence, where like the ego identity, it is one's immediate perception of selfsameness through time and the simultaneous perception of how others recognise one's sameness and continuity (E. H. Erikson, 1959/1994a). Alternatively, personal identity is occasionally referred to as numerical identity, where the identity is expressed such as "are identical", and "are one and the same" (Perry, 2005). In other words, there is just being one thing, similar to Erikson's meaning of identity. Perry goes on to define his identity being his own self-concept, what he thinks is true of himself. The information that he gets to form that conviction comes from the present perception, own memory, what others told him about himself and from applying general information about others to himself.

In regards to the self, Higgins (1987) had proposed three areas: actual self, ideal self and ought self. The actual self is defined as how we or others view ourselves having the traits that we have, the ideal self is how we or others would like ourselves to ideally represent our traits, and thirdly, the ought self is how we or others think that we should have the traits. These three areas of self combined with the two views on the self, which are a person's views and the views of their significant other, make up a person's six self-state representations. The actual versus own and actual versus other selves makes up a person's self-concept, while the ideal versus own, ideal versus other, ought versus own and/or ought versus other selves makes up a person's self-guides for themselves (Higgins, 1987). Individuals are driven to reduce their self-discrepancies by corresponding their self-concept with the related self-guide(s), for example, their actual/own versus ideal/own selves. The significance of their personal traits will depend on the individuals' self-discrepancies, which in turn is what makes up the individual differences, each with their selves. Although the focal point of Higgins (1987) work is the negative effect on individuals due to the self-discrepancies, the positive effect on individuals if they reduce their self-discrepancies to a null or near zero were discussed in Higgins, Shah and Friedman (1997)'s work.

The ideal self of Higgins (1987) was similar to the possible selves by Markus and Nurius (1986), where it is the self that individuals want to become, could become and

are afraid to become. Additionally, individuals form their possible selves through the way they view themselves in what they are capable of in their current and potential states (Markus & Nurius, 1986). For example, I am now a research student and a mother. On the other hand, I could be a pastry chef, bag designer or kindergarten teacher. Individuals' experiences and views of both media and society around them can also influence how they form their possible selves. The difference between the works of Higgins (1987) and Markus and Nurius (1986) is that the notion of possible selves comprises of not just the actual self but includes the concepts of the ideal self and a self akin to a negative future self where individuals are afraid to become.

Another different type of self is the social identity or group selves. Tajfel and Turner (2004) described this class of identity as a group membership, where individuals established themselves and by others as belonging to the group. In other words, individuals view themselves from the group that they believed they belonged to. In Tajfel's earlier works (Tajfel, 1970; Tajfel, Billig, Bundy & Flament, 1971), an experimental study was carried out involving children and adults being randomly grouped into two groups. The experiment was to study how the participants would award money to other people who are in the same and different group than themselves. Since then, Tajfel and Turner (2004) hypothesised that individuals formed their social identity through these three principles: (1) as individuals, they would attempt to have a positive self-esteem, which then leads to a positive social identity; (2) as a social group to be recognised as positively distinct from other groups; (3) individuals would either leave their existing group if they did not find it satisfactory, or they would help to make their group more positively distinct from others. In short, Tajfel and Turner (2004)'s social identity concerns how individuals categorise and compare themselves within the group, which in turn define themselves in the group as a whole.

Exploring Erikson's theory of ego identity, Marcia (1966) proposed the identity status model to understand how adolescents form their identity. Through analysing interviews and incomplete-sentences blank measures with college male students, Marcia (1966) proposed an identity status model, which consists of two processes: crisis and commitment. During the crisis process, adolescents choose which alternative that is meaningful for themselves. Their choice would then lead to the commitment process, where adolescents enter into the commitment of the chosen alternative. In this process, adolescents are said to have experienced the crisis stage and considered their chosen alternative. After having decided and accepted their choice, individuals have then reached the identity achievement status. Meeus, Iedema, Maassen and Engels (2005) supported Marcia's identity status model. However, Meeus et al. (2005) used the term 'exploration'

instead of 'crisis' to indicate that adolescents are exploring their alternative to select before they commit to the selected alternative.

Individuals are aware of their self-attributes and the potentials that they can aim and achieve in their lives. How they go about this was determined from the importance that they placed in how they view themselves and how their significant others see them. Ryan and Deci (2000) developed the self-determination theory (SDT) to study individuals' development tendencies and fundamental psychological needs that are the premise for individuals to motivate themselves and integrate their personalities. Individuals are motivated in ascertaining how they develop their selves through the satisfaction of three psychological needs: competence, autonomy and relatedness (Ryan & Deci, 2000). In their need for competence, individuals' need to excel in overcoming challenges leads them to be positive that they can achieve their desired results. In their need for autonomy, individuals' need for the ability to choose how to govern themselves leads them to be more intrinsically motivated to be in control of what they do. In their bid to satisfy their need for relatedness, individuals are extrinsically motivated to belong and connect with those who are important to them. This is so that the individuals feel that they are supported by those who are considered important to them (Luyckx, Vansteenkiste, Goossens & Duriez, 2009).

There was a hypothesis that the three fundamental psychological needs were related to how individuals formed their identity through the exploration and commitment processes. To support this hypothesis, Luyckx et al. (2009) have studied high school seniors and first-year college students year students to understand the relationship between identity dimensions and SDT, in which the psychological needs were established. These identity dimensions comprised an extended Marcia's identity model, Luyckx et al. (2006, 2008)'s models: commitment making, identification with commitment, exploration in breadth, exploration in-depth, and ruminative exploration. The authors chose twelfth graders (senior year) in their high school sample because these students were moving towards their college studies. Likewise, the authors chose freshmen college students because these students have just started their college studies and faced many new opportunities as well as uncertainties and challenges in colleges. From their research, the authors found that satisfaction of the psychological needs was highly related to the identity dimensions in both high school seniors and first-year college students (Luyckx et al., 2009). Moreover, the satisfaction of the students' psychological needs affects how they can form their identity over time. Individuals whose competence, autonomy and relatedness needs are satisfied, they then can make identity choices they approve of and ones they can identify.

From Freud to Erikson, Tajfel and Turner to Ryan and Deci to Luyckx, the formation

of individuals' identity is not a permanent state, rather an ever-changing state that continues to develop throughout their life stages. The formation of their identity is dynamic as various aspects need to be taken into account, such as individuals themselves, being in the social and psychological environment that they are in, their relationship with other people, and what motivates them in making the choices required. As E. H. Erikson (1959/1994a) puts it, individuals form their identity by having a sense of who they are, where they perceive themselves to be going and where they feel they belong in the world through acceptance in the social group. Individuals' choices in how they go about forming their identity seemed to be a key feature that is worth in investigating.

## 2.2 Identity and Identification

Identity, in the general sense of the concept, had been defined as a sense of who the individuals are, how they see themselves, and their place of belonging in the world (E. H. Erikson, 1959/1994a). In game literature, identification has been studied in games where players can role-play as the characters and socialise with other players in multiplayer games. These researches have studied how individuals or rather players, used identification as a mean to form their identity in the games (Klimmt et al., 2009; Van Looy, 2015).

In media, identification was thought to be important in how individuals can develop their identity. Cohen (2001) believed that how individuals' perception of others and how other people's understanding of themselves can affect individuals' forming their identity. The experience of adopting the goals, feelings and thoughts of a media character leads individuals to identify with the character (Cohen, 2001). Through identification with the character, individuals imagine themselves as the character and take on the character's perspective of the alternate world in the media. Cohen's discourse on identification concurs with E. H. Erikson (1959/1994a) who suggested that individuals form their identity through identification with others and taking on other people's characteristics.

In games, there have been many types of research regarding players' identity that are related to their identification with a game character. Games have characters such as in role-playing games and first-person shooter, or roles that players can take on such as the god-like role in strategy games where there are no visible characters. Klimmt et al. (2009) believed that games with characters or roles helped players to identify strongly with the characters or roles. Through the characters or roles' eyes, players can view the game world as to how these characters or roles do. When players can control the characters or roles in the game, their self-concepts are shifted temporarily towards the characters or

roles' attributes (Klimmt et al., 2009, 2010). This temporary shift of players' self-concepts follows Cohen (2001)'s theory of identification with the media character (Hefner et al., 2007). Furthermore, players can simulate their identity through identification in games as players can choose how to act out the characters or roles given (Klimmt et al., 2009). Games allow players to simulate being the character in which they can experience the situation that the character is in, as a result of merging their selves and the character that they play. Klimmt et al. (2009) described this simulation as role-play where players can act out the character as much as they are allowed to in the game.

Instead of Klimmt et al. (2009)'s temporary shift in players' self-perception, Van Looy (2015) suggested that identification in games is where players temporarily create an additional self, different from themselves. In this case, Van Looy believed that players are instead forced to take on the character that is different from themselves. Also, the character that players take on would not be able to exist and act in the game without the will of the players. When players can act and control the game through the character, players are said to form their gaming experience, a process that's being named as puppetry (Calvillo G3mez, Cairns & Blandford, 2008). Puppetry could also be about control in which the players takes agency through animating the character within the game (Calvillo G3mez et al., 2008). According to the theory of puppetry, players are thought to fuse their identity with the character so that they could control the game, and consequently take ownership of their gaming experience (Calvillo-G3mez & Cairns, 2008).

Additionally, Van Looy supported Cohen's idea of identification with the character whereby players can adopt the character's perspective and imagine themselves experiencing the character's emotions and cognition. However, there is a distinct difference between media and games in that games gives players the agency to initiate and perform actions (Salen & Zimmerman, 2005). Players are able to take on an active role by assuming an in-game identity of the character, as opposed to just being a witness or bystander when identifying with a media character.

Many identity studies in games have focussed on identification with characters because the characters are obvious representation for players when they assume the roles to play. These representations are more so evident when players get to play in the first-person perspective, able to view the game world through the characters' eyes (Klimmt et al., 2009). Moreover, controls were deemed crucial in gameplay as the control of characters helped players to identify with their character (Murphy, 2004). These aforementioned identity and identification studies have recognised that both controls and characters facilitate players' identification in games. With these experiences of identification with

the character and the game, players are said to be able to form their identity in the game.

Through identification with the character, players are now able to form their identity in the game where they can perceive themselves to be going and belong in the group of players. Moreover, player identification with the character and in extension, the game itself allows players to attach themselves to the game (Murphy, 2004). Identification with the game will enable players to have all the attributes of their identity and that of the character, so that they could make their gaming experience their own. Erikson's account of identity fits in with the literature on player identification with the character in which players have a sense of who they are in the real world and could differentiate whether the character is similar to them or not. Through the agency of the character, players can move and control (within the game limits and designs) to go where they wanted to in the game and felt that they belong there as was their choice.

Gee (2003a)'s theory of projective identity (more in Section 2.5) also coincides with literature on player identification with the character as well. As stated by Gee, projective identity comprised what players wanted their character to be, with a narrative that the players wanted the character to have in the time that they play the game. Players move through the game with the aid of the character, having perceived what they wanted to achieve in the game. Through identification with the character, player is able to project their values and desires onto the character, with the aim of making the character become what players wanted within the limitations of the character, and in extension the game itself (Gee, 2003a).

Players can build and play out the different identities in the game to enrich their gameplay experience. Rigby and Ryan (2011) believes that games meet players' basic psychological needs through their in-game identity. The authors outlined a Player Experience of Need Satisfaction (PENS) model consisting of three psychological needs of players when they play games. The need to satisfy these three basic psychological needs in games that are competence, autonomy and relatedness, have been adopted from the self-determination theory by Ryan and Deci (2000) to fit into the game context.

From the PENS model, players' need for competence refers to the necessity to better their abilities to accomplish tasks or overcome challenges. Similar to children who build more realistic self-esteem after having mastered the skills to walk and what it means to be able to walk (E. H. Erikson, 1968/1994b), players' need for competence affect how they perform in the game. Secondly, players' need for autonomy, which stems from their need for the ability to choose what, how and when to carry out the actions leads them to be more in control of their choices. Thirdly, the need to satisfy their relatedness refers to players' motivations to connect meaningfully with other players in the game. They want

to belong and connect with those who are considered important to them (Luyckx et al., 2009).

Although Ryan and Deci (2000) did not outrightly state that the satisfaction of these three psychological needs was what constituted as identity, the PENS model was believed to help facilitate players' construction of identity when they played games. The authors' stance on identity in digital games leaned heavily on players' abilities in the creation of their virtual personalities and the choice of making their own paths within the game. Players can choose how to develop their game characters, pursue which activities they want to do and plan strategies to overcome challenges that would help form their identity in the game (Rigby & Ryan, 2011).

Tamborini, Bowman, Eden, Grizzard and Organ (2010) extended the PENS model, which was developed by Ryan, Rigby and Przybylski (2006), by proposing a model of enjoyment as the satisfaction of intrinsic needs. From their analysis, they found support for enjoyment as the relative effect of players having their competence, autonomy and relatedness needs satisfied. The authors conducted their study in an experimental setting where they had briefed the participants on how to play the game Brunswick Pro Bowling and the conditions of the bowling competition to win against other participants (Tamborini et al., 2010). The participants are told that a top team from the game will be given a cash prize. However, there are some reservations due to this specific instruction to the participants for the experiment. The extrinsic motivation in the form of the cash prize could have contributed to participants' enjoyment in the game though this factor was not discussed in the study. Moreover, the authors' claimed that autonomy needs' have been met and thus lead to enjoyment. With the conditions set by the authors dictating how participants play instead of them playing their way beat the purpose of participants satisfying their autonomy needs (Rigby & Ryan, 2011).

In a study with a MMORPG game, Mabinogi, Doh and Whang (2014) examined how players develop their identity through their behaviour changes when they play the game. Instead of using a conventional MMORPG that usually implement a class system where players can choose for their characters, Doh and Whang (2014) chose Mabinogi that utilises a skill system so that players can change the appearance of their characters with a combination of attributes. The authors thought that the game was a proper fit for the study as they could study players' behaviour in setting up their characters' identity. Using the Q methodology by Stephenson (1954), the authors analysed players' behavioural statements that represent their past and present self.

Even though the Doh and Whang (2014) did plagiarise almost entirely two paragraph's worth from Van Looy et al. (2012)'s work, their studies suggest that players

formed three types of identity development: achievement-oriented, control-oriented and relational development. In the achievement-oriented development, players' past self would be to follow how the majority of the players play and to escape reality. Then, their present self would start to consider the game as their personal growth through self-achievement in quests and goals. In the control-oriented development, players' past self has treated the game as an activity to enjoy. At the later phase of their gameplay, players treated the game as a place for problem-solving where they could better control and plan strategies to complete the quests. As for the relational development, players' past self comprised them considered the game as a private place for themselves. Eventually, they interact and form a community with other players while still able to maintain their self-image in the game.

Although Doh and Whang (2014) focussed on using MMORPG in their study, they have generalised their findings to the online game world, which in itself is misleading. In the massively multiplayer online game (MMOG), there are other types of games apart from the popular MMORPG such as massively multiplayer online first-person shooter game (MMOFPS), massively multiplayer online real-time strategy game (MMORTS) and massively multiplayer online dance game (MMODG). Even though these MMOGs are played online, their features are different and as such, a theory about players' identity from one game genre (in this case, MMORPG) cannot merely be applied to all MMOG without further research.

As the discussion on the relationship between identity and identification gets clearer, many researchers have opted to study games with characters that players can identify with when they play. Games that have characters for players to assume the role, primarily in role-playing games, provide ample opportunities for these researchers to study players' identification with the characters. Researchers presumably study these specific sorts of identification because of how players identify in games, particularly in games where there is a visible representation of characters in them. Therefore, these researches have examined specific games or instead extended their ideas on identity and identification in games such as in RPG and shooter genres. However, the whole concept of genres used in studying players' identity and identification in games is problematic. I will discuss the issue of focusing on genres in identity and identification studies in the next section.

### **2.3 The Problem with Genres in Identity Studies**

Many studies of identity in games have relied on particular game features and therefore focused on specific genres of games. Moreover, these studies leaned heavily towards

games from the RPG, shooter, and racing genres in particular. Games typically have narratively defined characters that players can take on and carry out in-game objectives that are related to the characters. For example, Klimmt et al. (2010) studied players' experiences in particular, as a World War II soldier in a first-person shooter game, and an illegal race driver in a racing game. In their study, the researchers wanted to investigate the relationship between players' self-concept and the character's concept in games that have narratively defined character.

Similarly, when thinking about the role of identity in terms of aggressive behaviours around digital games, Konijn, Bijvank and Bushman (2007) found that players were likely to be more aggressive when they could identify with violent game characters after having played shooter games. The researchers based their findings with players who played violent games such as *Doom 3* and *American's Army* versus players who played non-violent games such as *The Sims 2* and *Mario Kart*. Even though the games used in Konijn et al. (2007)'s study are from various genres, there are still characters for players to play and identify. Furthermore, their study employed a wishful identification scale, which was adapted from Feilitzen and Linné (1975) whose original study aimed to study children's identification with television characters. Thus, Feilitzen and Linné (1975)'s measurement scale was arguably not suited to the more complex situations of games where players can both relate to characters but also assume control and agency of those characters and so in some sense, be themselves.

In addressing the issues above on identification with the character, Van Looy et al. (2012) used three dimensions for players' identification in the massively multiplayer online role-playing games (MMORPG): avatar identification, group identification and game identification. As the game used in their study involves social interaction between players, the researchers included the group and game identification constructs into their measurement scale. Due to the study which focussed on games with particular features, in this case, MMORPG, Van Looy et al. (2012)'s findings are arguably inapplicable for other players in other game genres. Just as many other scholars who have studied players' identity, Van Looy et al. (2012) have only provided theories that were relevant to players playing MMORPG. Nevertheless, researchers tend to generalise their findings from specific genres to across games concerning players' identification with the character even though there is no evidence to suggest this presumption.

Moreover, to focus on players' experiences in particular game genres is problematic. To begin with, classifying what is genre itself posed many difficulties in its exact definition, overlapping between genres and inconsistency due to new works continually being produced (Wolf, 2001). In games, genres are used to describe how games are played

or what players should do to achieve the goals in the game (Whalen, 2004). According to R. I. Clarke, Lee and Clark (2015), the use of genres in games somehow failed to classify games that would help scholars, creators and players among others to communicate about the games. In the past, scholars have attempted to classify games into genres based on gameplay and interactivity (Wolf, 2001); massive, mobile and real (physical relocation of players) (Whalen, 2004); and space, time, players structure, control and rules (Aarseth, Smedstad & Sunnanå, 2003). Despite these efforts, R. I. Clarke et al. (2015) claimed that players were unable to identify these genres as players were unable to relate with these coined genre terms.

Even though the aforementioned studies on player experiences have focussed on specific game genres, though in actuality this was not the case. Instead, these studies examined particular game features that facilitated players' identification and in extension, their identity formation in the game. There has been a lot of focus on players' identity in RPG due to the visibility of characters, in which players can see the character and assume it's role. However, there are many games that do not have visible or playable characters at all, and many of these studies did not address this knowledge gap.

In contrast to the studies mentioned earlier (e.g. Klimmt et al. (2010), Konijn et al. (2007), Van Looy et al. (2012)), Gee (2003a, 2005b) has studied player identity in games with and without playable characters. Instead of focusing on specific genres like many studies have done, Gee (2003a, 2005b) explored player identity, mainly through the notion of projective identity across game genres. Gee pulls various genres together when he formed and analysed the theory of projective identity. He did not restrict projective identity into a single genre, or rather just games where there are playable characters. Similar to researches on identification with the character, the projective identity revolve around the character as well. However, unlike many studies, Gee's focus was not just the players' identity in specific genres, rather in principle a projective identity that encompasses various genres.

Additionally, many studies on player identity that were focussed on specific genres were not relevant or cannot be applied to players in the general sense. Specifically, these studies targeted games that have features such as choosing which character to play, customise and role play as the character so that they could study players' identity in games. Yet, these studies have focussed on particular features of the games, and consequently, specific game genres such as RPG. The studies missed out on how other features of the games could affect players' identity when they play in the games. Even though these studies focussed on specific genres, their findings seemed to have extrapolated towards the general population of players.

On the other hand, Gee's notion of projective identity seemed to have a compelling case for players' identity as he had analysed projective identity in various game genres, unlike many studies have done. Thus, instead of focussing on game genres that in itself is problematic, I will focus my studies on what games have to offer with its variety of features. With this direction, I will investigate how players can form their identity without having being restricted to game genres. In the following sections, I will first discuss the notion of players' identity in studies regarding players' identification with characters and avatars through:

- (a) character and avatar customisation
- (b) gender exploration, and
- (c) narrative settings

These three areas that I will discuss are not areas that I have chosen; instead these areas have been commonly studied by researchers who investigated players' identification with the characters and therefore are worth reviewing in this chapter. Afterwards, I will discuss Gee's notion of projective identity from his analysis in various games where he had claimed that players could form their projective identity just as he had done. To aid comparison with other game researches, I reported genres in the studies chapters (Chapter 3, Chapter 4 and Chapter 5). This report of genres was meant to show the readers of the different game styles that players experience and that there is a diversity of games that players play in this research of players' identity in games.

## 2.4 Identification with in-game characters and avatars

Identification with characters in games has been prominently studied because these games have visible characters that players can easily take on and identify with the characters. Identifying with a character was deemed inevitable as this is part of the game's requirement (Garris, Ahlers & Driskell, 2002). By taking on the character's identity in the game, players can be different people than who they are in the real world. They can explore and build their identities in an environment where they can play out aspects of the self in the game (Turkle, 1994). They can play a Priest-Night Elf whose appearance as a night elf has the agility and strength of a priest in *World of Warcraft* (WoW), a squad leader who leads his team in the Battle for Stalingrad in *Red Orchestra 2*, a space marine who shoots the undead and demons in *Doom* series, or even a god-like person who builds cities and research for technologies in *Civilisation*.

In literature, the term avatar was commonly used to denote a virtual representation of players where they can create and choose which attributes to portray in the game (Turkay & Kinzer, 2014a, 2014b; Fox & Ahn, 2013). On the other hand, the term character was commonly referred to both playable and non-playable characters set within the game narrative (Dahya, 2009; Ruch, 2012). Regardless of the differences in the common definition, there were also researchers who used both the avatar and character terms interchangeably in their work to refer to the virtual representation that players play in the game (Turkay & Kinzer, 2014a, 2014b; Martin, 2012; Dahya, 2009).

A campaign by Sony for their PlayStation 2 (PS2) marketing advertisement, came up with the slogan ‘Live in your world, play in ours’, to invite players to play in the PS2 game world while still living in the real world (non-virtual world). Games encourage players to play with their characters and avatars through in-game controls and controllers such as the computer mouse, keyboard, joystick and console controllers like the PS2 and Wii. The feedbacks that players received from the controller, for example, the jolts, shakes and vibrations helped to facilitate players to identify with the game characters and avatars (Murphy, 2004). Similarly, players could control and customise appearances and attributes of their characters and avatars by pressing specific buttons or moving the mouse or joystick in a particular direction.

Murphy (2004) believed that when players received feedback from the game, they were able to identify deeply with the character and avatar. Drawing from both her experiences and that of her participants’, Murphy (2004) described players’ identification with the character as facilitated by the in-game structures such as perspectival modes, cinematics and narration. Furthermore, the author suggested that players’ play on identity, particularly their identification with the character comprised as a transition between embodiment and control of the avatar, and watching the game narrative unfold through spoken dialogues between characters. The author regarded game characters as avatars when she could identify with them but viewed them just as characters when she could not identify with them.

Additionally, playing in first-person and third-person perspectives were suggested to affect how players identified with the character as their avatar. Playing in the first-person perspective appeared to deepen players’ identification with the character as they saw the game world through the avatar’s eye. Alternately, playing in third-person perspective allow players to watch their avatar move around the game. Identification with the character was also thought to influence players in the real world (Murphy, 2004). However, whether the identification had an implicit or explicit effect on players was not explored in the study. The author’s discussion on players’ identity weighed heavily on

their identification with the character facilitated by real-world controls that mapped onto the in-game controls. There was no further insight offered on players' identity in games where there were no playable characters.

Identification with character and avatar were believed to have led players to enjoy playing their game (Trepte & Reinecke, 2010; Klimmt et al., 2009; Hefner et al., 2007). In a pilot study on players' identification with a character, Hefner et al. (2007) suggested that interactivity with the game could facilitate players' identification experience. The researchers proposed that players experience identification with the character when players found the character attractive that they wanted to perceive themselves closer to their ideal self (Hefner et al., 2007). In their subsequent work, the researchers found further support that players had considered to perceive themselves temporarily as the character when they took on said character's valued attributes in the game (Klimmt et al., 2009). Players' self-perception with the character was argued to be how players identified with the character in digital games. The authors alleged that players could reduce, to the point of eliminating, their self-discrepancy by identifying more with their ideal selves that they perceived in the characters that they played. Klimmt et al. (2009) also hypothesised that players who strongly associate their self-concepts with the attributes of the characters would identify with the character. On the other hand, players would not associate their selves much or at all with concepts similar to themselves. However, it was unclear in Klimmt et al. (2009)'s paper whether players' lack of association with similar concepts referred to concepts of characters or something else altogether.

Players can select which character attributes they want to identify with including in fantasy characters like the *Orcs* in *WoW*. Players may choose to identify with the orcs' strong-willed and battle resilient attributes instead of the characters' physical appearance of frighteningly built bodies and green skin ('Orc (playable) - WoWWiki - Your guide to the World of Warcraft', 2015). However, even with the ability to select, there was also a risk that players may have unconsciously identify with the characters' negative attributes, although Klimmt et al. (2009) had not provided any evidence regarding this. Although they had laid such claims on players' identification with characters, there was no empirical evidence to support the theory in their paper. Moreover, Klimmt et al. (2009) believed that players who identified with a game character due to the reduced discrepancy between players and the character was theoretically grounded. Nevertheless, the authors provided no support for this supposedly grounded theory apart from comparing existing social-psychological models of self-perception.

In their subsequent work, Klimmt et al. (2010) attempted to provide empirical findings on players' identification with the game character through two studies using

Implicit Association Test (IAT) by Greenwald, McGhee and Schwartz (1998). The IAT was designed to measure individuals' implicit attitudes through their association of two different concepts with the evaluation attribute (Greenwald et al., 1998). For example, in an age IAT, participants were asked to distinguish between two concepts, young and old faces with evaluation attributes of 'good' and 'bad'. Participants were to identify the concepts and attributes by pressing a particular key on the computer keyboard (Project Implicit, 2015). If a target word belonging to the evaluation attribute 'bad' or a target image to the concept 'young' appeared on the computer screen, participants were required to press a particular key. On the other hand, if a target word belonging to the evaluation attribute 'good' or a target image to the concept 'old' appeared, participants were required to press a different key.

After sorting several words to their respective attributes or concepts, the screen would then display a different combination of concepts and attributes assigned to different keys. Participants would then need to associate the target word or image belonged to 'bad' or 'old' by pressing a key, and associate the target word or image belonged to 'good' or 'young' by pressing a different key. After completing the series of target words, another set of words were displayed on the screen with different combinations of concepts and attributes. Participants' response times were recorded to measure their association between 'young' and 'old' concepts. Those who associated more with the young people tended to respond faster when associating 'young' and 'good' onto the same key, compared to when 'young' and 'good' were assigned to different keys. Additionally, they also responded slower when associating 'old' and 'good' onto the same keys, than when 'old' and 'good' were assigned to different keys.

In their study, Klimmt et al. (2010) had randomly assigned participants to play either *Call of Duty 2* (COD2), a first-person shooter, military game or *Need for Speed: Carbon* (NFSC), a car racing game. After having played the game for a specified time, participants undertook the IAT where they associated me-, military-, racing- and furniture-related concepts. Furniture-related concept was chosen in the study for its neutrality although the authors could have just easily used 'other' as the opposite of 'me'. In the analysis, participants who played COD2 were found to associate stronger with me and military concepts compared to me and racing concepts. Conversely, participants who played NFSC were found to associate stronger with me and racing concepts compared to me and military concepts. De Houwer (2006) suggested that should participants be aware of what the IAT measures, their performances could affect the outcome of the test. He then cautioned against assuming that the findings from implicit measures would convey participants' unconscious attitudes and cognitions of concepts (De Houwer, 2006).

Nevertheless, Klimmt et al. (2010) believed that they had the empirical evidence for Klimmt et al. (2009)'s identification model and that players experienced an automatic shift in their self-perception with the character. However, the implicit identification measured through IAT did not lead to game enjoyment, as suggested by Klimmt et al. (2009). In their study, Klimmt et al. (2010) considered players' identification with the character as a cognitive process instead of a result of players' experience in the game. The authors did not expound on players' game experiences and preferences, which could have lent further insights into players' identification with the characters. Otherwise, there is little point in identifying with characters in games if players cannot enjoy playing the game. No study has been done yet on whether the identification model could apply in games where there were no observable or playable characters such as in *Civilisation* and *Game of War*, which limits the theory for other game genres. Furthermore, there has yet to be empirical work on whether Klimmt et al. (2009)'s identification model would hold for games with customisable characters and avatars.

### 2.4.1 Character and avatar customisation

There are games with characters and avatars that allow players to customise the characters' attributes such as physical features, gender, race, class and accessories. Through these customisations, players get to choose what they wanted their characters and avatars to have in the game. Players' choices in character and avatar customisation help with their identification with the character and avatar, and subsequently, therefore might be important to form their identity in the game. In a study with MMORPG players playing World of Warcraft, Bessi re et al. (2007) suggested that players would create their idealised selves when allowed to create an alternative self in the game. Players can play out the aspects of their ideal self in a game, such as a braver and stronger character than they are in the real world. Players, even children players can experiment with different identities without real-life consequences through character customisation (Olson, 2010). Identification with characters through experimentation allows these players to be powerful and become famous through the game character (Olson, 2010). This experience gave players the enjoyment that they seek in the game.

In avatar identification, players can customise their characters, either to a similar or ideal version of themselves. Van Looy et al. (2012) proposed a model of identification in a massively multiplayer online game (MMOG) with three dimensions: avatar identification, group identification and game identification (Van Looy et al., 2012). The first dimension, avatar identification consisted of wishful identification, similarity identification and embodied presence. In their model, the authors adopted the classic definitions for both

wishful and similarity identification on avatars. Wishful identification referred to players who temporarily reduced their self-discrepancy to take on after the character that they wanted to be (Klimmt et al., 2009; Feilitzen & Linné, 1975). On the other hand, similarity identification applied to players who shared similar attributes with the characters that they played as (Feilitzen & Linné, 1975; Chandler & Griffiths, 2004; Maccoby & Wilson, 1957). The authors also included embodied presence when identifying with the avatar that referred to “feeling of presence induced by gameplay” (Van Looy et al., 2012).

However, their method of designing their identification model consisted of using a self-reported 29 5-point Likert items in their Personal Identification Scale that stretches quite thinly to test 9 hypotheses. Out of the 29 items, the scale consisted of 17 items to test three hypotheses on wishful identification, similarity identification and embodied presence with the character. The remaining hypotheses were aimed at the game and group identification analyses although the authors left out a game identification item in their analysis. In the result, players were found to identify strongly with their avatar when the customised avatar was a strong portrayal of their ideal self (Van Looy et al., 2012). They also shared the same beliefs with Klimmt et al. (2009) in that players experienced a temporary altered state when they associate themselves with the character. Moreover, Van Looy et al. (2012) supports the self-discrepancy theory by Higgins (1987), where players were believed to identify with their avatar when their actual selves have a higher discrepancy with their avatar. With their assertion, players could highly identify with their avatars through wishful identification than similarity and embodied presence identification.

Klimmt et al. (2010) suggested that self-discrepancy in players with their character led to higher game enjoyment but provided no findings on this. However, Trepte and Reinecke (2010) suggested that players’ lower self-discrepancy with their character led to higher game enjoyment. Players who created their avatars to highly resemble their real-world selves were found to identify their avatars more than those with highly dissimilar avatars from themselves. The authors also found that different games led players to either form a similar or idealised character to suit the game narratives. For example, in non-competitive games like *The Sims*, players were found to equip their character closer to their real-life personalities. On the other hand, in competitive games like *GTA: San Andreas*, players’ characters were found to have higher differences with their actual selves. Nevertheless, Trepte and Reinecke (2010)’s study was based on participants creating their avatars with personality traits from the 10-item version of the Big Five Inventory by Rammstedt and John (2007). The participants created their avatars after having read the game descriptions where the avatars will be. Thus, the created avatars were actually

in theory rather than actual avatar creation in games. As such, the authors did not provide any empirical work on whether the participants would be able to identify with their avatars in the game or not.

### 2.4.2 Gender exploration

Players can also experiment with different ideas of character identities where they are curious to discover what they could experience from playing the game itself. For example, players could explore their gender identity by playing a different character gender than their biological ones (Lee & Hoadley, 2006). With this freedom to choose their path and connect with other characters in the game (Rigby & Ryan, 2011), players could take charge of how their experience in playing the game would be.

When playing as the opposite gender in games, players could identify with the avatar that they chose, seeing it as an aesthetic or a character, instead of identifying the avatar as a person (MacCallum-Stewart, 2008). In her study, the author interviewed and observed WoW players for their experience playing the opposite gender. Male players chose to play as female avatars because of the avatars' attractive appearances. On the other hand, female players wanted to play as male avatars to avoid the unnecessary attention that they received if they played as female avatars. By playing as male avatars, female players also wanted to be treated as gaming equals in the game. The author found that players chose to play the opposite gender for their aesthetic pleasure rather than as a depiction of their actual sexual orientation. Players wanted to normalise the practice of playing the opposite gender and not to be seen as making their gaming environment "safe, heterosexual and emancipating" (MacCallum-Stewart, 2008). The author implied that players regarded the choice to play the opposite gender as similar to choosing the character race and class. MacCallum-Stewart (2008) believed that players could identify strongly with the characters that they role-played as they help to create the character itself and the associated background story that are exterior to the gameplay. Nonetheless, the author did not provide any statistical data to support her belief that players indeed had a strong identification with their character. Apart from mentioning her data gathering method, the author failed to explain further on her methods such as the size of her study and analysis approach. These vital yet absent pieces of information could lend further credence to the author's premise on players' experience with exploring their gender identity.

In a gendered self study, Royse, Lee, Undrahbuyan, Hopson and Consalvo (2007) suggested that female characters could help in female players' identification and enhance their pleasure in the game. The female players in the study have expressed their wish

to have control over how they could represent themselves, in that they could choose which character to play as. The authors whose study focused on female players on their experience playing games found that the players created a combination of feminine and masculine attributes that appealed to them such as sexuality and strength respectively. The ability to control and choose how they wanted their character to be like have led to players' enjoyment in the game (Royse et al., 2007). Games were used to explore players' gendered self where they wished to challenge the cultural bias of female characters that were often portrayed as the weaker characters (Royse et al., 2007).

Royse et al. (2007) employed two research groups using two different data gathering methods in their gendered self-study. The first research group then conducted three focus groups, comprised of power gamers, moderate gamers and non-gamers (Royse et al., 2007). The power gamers consisted of players who played at least 3 hours weekly, moderate gamers who played approximately one to three hours weekly and the non-gamers who did not play games. These focus group participants were then asked about their gaming experiences and their take on the gaming culture. Meanwhile, the second research group conducted in-depth interviews with a different group of participants about their 'experiences, views, perceptions and the meaning that they give to computer games' (Royse et al., 2007).

The researchers then collated and analysed data from both research groups although they had not stated which analysis approach they adopted in their study. The interview topics mentioned in the study were inconsistent between the first and second group of researchers. Even so, the authors structured their model of the gendered self based on power, moderate and non-gamer groups. The authors suggested that female players who were at different playing level would express differently about their gendered self in the game. Power gamers were believed to construct a more fluid and androgynous gendered self compared to moderate gamers who were distant from their gendered self in the game (Royse et al., 2007). Although the authors acknowledged that they did not ask their participants about their identification with their avatars, they claimed that players have indeed identified with their avatars. Through the data gathered, the authors believed that power gamers had identified fully with the avatar when compared to moderate gamers who were conflicted to identify with the avatar (Royse et al., 2007). Moreover, their model of the technology of the gendered self only catered for female players and as such had no bearing on male players.

In the game WoW, the Blood Elves male race were often associated as gay (Packer, 2014) due to the textual depiction of the elves' sexuality in the game. As a result, the male Blood Elf character has marked players who chose to play them as gay. Due to this

stereotype, many homophobic remarks were targeted at those who wanted to play as the Blood Elves males. However, there are some players who took this stereotype labelling to their advantage. Many female players have chosen to play as male Blood Elves to ward off any unwanted attention from other male players (Packer, 2014). Moreover, the aesthetically pleasing appearance of the male Blood Elves compared to their counterparts in the Horde faction draws the female players to play them. Playing as different character gender open up the opportunity for players to be treated differently than what they would have normally experienced in the game when they play their character gender. Having said that, Packer's study did not explicitly mention about how players would form their identity playing their gender in the game.

Hayes (2007) believed that games allow players to enact and experiment their identity, particularly gendered identity. In her study with two female participants who played the RPG game, *Elder Scrolls: Morrowind*, the author suggested that these female participants were careful with how they develop their personal characters. With their characters, the participants focussed on getting the experience that they wanted in the game. This experience included conforming to gender stereotypes, in particular, avoiding fighting and violence during gameplay. However, these female participants have also developed their characters to challenge gender stereotypes in which they choose to "kill things" and choosing a character to for the mere pleasure of exploring new places and healing other characters (Hayes, 2007). Instead of generalising her findings to the general population of players, the author wanted to emphasise that different female players have different responses to stereotype practice in games. This practice in female players could have been similar or different from their male counterpart when playing the game. However, Hayes did not interview male players in her study, which could be an added value to her findings.

### 2.4.3 Narrative Settings

In their work, Klimmt et al. (2010) suggested that players could identify strongly with a narratively defined character in a game. A story-based game was believed to facilitate better player identification with the character compared to a non-story based game where there was little or no story line to support the narrative of the game (Schneider et al., 2004). Schneider et al. (2004) used four first person shooter (FPS) games, where *Doom 2* and *Quake 2* were selected for their minimal story line and *Outlaws* and *Half-Life*, which were known for their narratives in the gameplay. The authors recruited participants who were all experienced players but failed to mention the participants' preference for game genres or whether the participants were experienced FPS players. The participants' game experiences could be a factor in identifying with the character in the game.

Identification in Schneider et al. (2004)'s study was measured using three different scales based on players' identification with their character, how they overcame the antagonist(s) and met the goals of the characters, which the players' performed as the characters. Participants answered the questionnaire on identification after having played each game for only eight minutes. The brief gameplay session was thought to be suited for the study where participants who were experienced players could advance far in their gameplay. However, the authors made no allowance for inexperienced players on whether they could identify with the character just as their experienced counterparts had done so in the study (Hitchens et al., 2012). Furthermore, the eight minutes gameplay was also argued to be insufficient for players to advance far enough to experience much of the narrative in the game (Hitchens et al., 2012).

Schneider et al. (2004) had also applied electrodes to their participants' feet to measure physiological responses of arousal during game play. The application of electrodes on participants was unusual as players were not in the habit of having their feet soaked while playing games outside of the study. The physiological measure that was simultaneously conducted had inadvertently become a confound variable to the identification study. If the authors had not conducted the physiological measures simultaneously with the identification study, the finding on players' identification with the character would be more inclined to be taken into consideration. In the study, participants were allowed to customise and name their character in the games. However, the authors did not shed any insight on whether the customisation would affect players' identification with the character as the measured items in the questionnaire were vague on character customisation. The authors used three scales to measure players' identification with the character, goal to overcome the opposition and general goals of the character. None of the items from the identification scale relates to the character customisation and

its affect on players' identification with the game.

Schneider et al. (2004)'s work raised more questions on its validity of players' identification with the game because there was not much specific information on how players played the game in regards to forming their identity. There was no mention in their paper if the game play started from the time their participants customised the characters or after they had customised the characters. Customisation of character could take a while, depending on players' level of experiences and preferences on what they wanted the characters to look like. Even though the authors had informed the participants that they could customise the character, the authors did not shed further insight as to how the customisation would contribute towards players' identification. The authors employed a measurement scale for players' identification with the game, but the measured items in the scale were rather vague on character customisation. There was also no mention on participants' preference of game genre, or that the participants are all experienced or avid FPS players who could attribute to supporting the hypothesis.

In another study on narrative identity, Hitchens et al. (2012) challenged Schneider et al. (2004)'s work by repeating the experiments using two story, *Clive Barker's Undying* and *Bioshock*; and two non-story based games, *Prey* and *Doom 3* as well. All of the games used in the study were from the FPS genre, similar to the game genres used in Schneider et al. (2004)'s study. The authors claimed that Schneider et al. (2004)'s eight minute game play was too brief for the participants to get into the game, let alone able to experience the game narrative. Instead, Hitchens and colleagues increased the game play to 45 minutes per game so that players had sufficient time to "get into the game". After the participants played each game for 45 minutes, Hitchens et al. (2012) then interviewed their participants, rather than using questionnaires to measure players' identification with the character as Schneider et al. (2004) have done. The authors analysed each interview for participants' usage of pronouns when describing the relationship between participants and character in the game. The length of the interviews lasted for only two to three minutes, to which the authors focused their analysis on how the participants phrased their responses rather than the content itself.

Although there was no hard rule on how long an interview should be, typically an interview should cover the following: (a) an introduction to the research topic to ease the participants during the session, (b) opening questions to draw out background and contextual information, (c) more in-depth questions, moving from general to specific topics, and (d) winding down the interview session (Arthur & Nazroo, 2003). The brief interview session in Hitchens et al. (2012)'s study would not be sufficient to cover the necessary questions needed to investigate how the game narratives have an effect on

players' identification with the character. As the participants had to spend 45 minutes playing four games each, the brief interview session was presumably intended to not take much of the participants' time.

During the interview, the participants used different degrees of pronouns to describe their identification with the game characters (Hitchens et al., 2012). The authors assumed that the more participants identified with a character in a narrative-based game, the more the participants would utter first degree pronouns when describing their experience in the game. However, the authors found that game narratives did not have any significance on players' identification with the character, which was in contrast with the findings from Schneider et al. (2004)'s study. Unlike Schneider et al. who used three scales to measure identification with game character (protagonist), overcoming game antagonist(s) and the general goals of the protagonist, Hitchens et al. focused on personal pronouns as the personal distance to measure players' identification with the game. The different measures of identification in both studies could attribute to the different findings on players' identification with the character in narrative-based games. Additionally, should Hitchens et al. have spent more time interviewing their participants, their findings could be better grounded in that players indeed did not identify with characters in narrative-based games or otherwise altogether.

In contrast to Hitchens et al. (2012)'s findings, other works on a narrative setting were more positive about players' identification with the game. Players were thought to be able to form their identity in computer games that had a narrative dimension (De Mul, 2014). Through the narratives, players could discover new worlds and aspects of their selves in the game. Although the game has a pre-designed and visible narrative, Wendler (2014) claimed that there was another narrative, which were implied through the actions and engagement of the players in the game. In his paper, Wendler (2014) used the games, *Portal* and *Portal 2* as examples whereby players must find out about the character they were playing through the game narratives. The author raved on the application of procedural rhetoric to conceptualise his notion of narrative identity in games.

Wendler (2014) believed that players must play as the character to some extent that they identify with and progress further in the game where they would be persuaded through the game narratives to either accept the character or not. Needless to say, as the author did not have any empirical work to support his claims, there was no mention on which aspects of the character that players could identify with in the first place. Also, the author did not explain about players' identity if they did not accept the character they played as in the game. De Mul (2014) and Wendler (2014)'s views on narrative identity

stemmed from their philosophical and rhetorical background respectively, and as such did not carry out any empirical work to cement their opinions on narrative identity. However, they both stressed that their work was on conceptualising narrative identity, but without any empirical grounds, there was no way of knowing if their concepts could be reliable or not.

I have reviewed the studies mentioned above on characters and avatars as central to players' identification in games. Many of these studies are, in fact focussing on players' identification with characters and at times, have blurred with identity. Nevertheless, there is more to identity in the game than just being able to identify with the characters. Some games have no playable or visible characters that players play in such as *Civilisation* and *Tetris*. What then would the identity of these players be where there were no characters or avatars to play? In the next section, I will review in the next section on Gee's work regarding players' identity in various games as a contrast to the studies reviewed in the current and preceding sections.

## 2.5 Projective Identity

The studies that were mentioned earlier focused on genres such as MMORPGs in *WoW*, FPS in *Call of Duty 2* and racing game in *Need for Speed*. As a result, the emerging theories only apply for specific game genres and not for across genres. Game genres are possibly misplaced when classifying games, and it is certainly difficult to generalise across games. Perhaps, these theories on players' identification with the character and identity are only relevant to these specific features of the games, rather than genres themselves.

Gee (2003a)'s notion of players' identity stemmed from his experiences playing games of various genres, or specifically games with various features. According to Gee, there are three types of identities in digital games: real-world, virtual and projective identity (Gee, 2003a). Firstly, the real-world identity refers to players themselves who plays the game, for example, "James Paul Gee", his own real-world identity while playing a game. Secondly, the virtual identity refers to players' identity as the virtual character or in-game role that player plays in the game. Thirdly, the projective identity is where players project their values and desires onto the game character with hopes that in time, the character would become what they wished it to be within the character's in-game limitation (Gee, 2003a).

Gee's real-world identity concurred with E. H. Erikson (1959/1994a) who posited that individuals formed their identity being aware of who they are, where they perceive themselves to be going and where these individuals feel they belong in a social group.

However, Gee also stated that players have other identities than just their real-world identity, that was their virtual and projective identity. These latter identities are different from the players' real-world identity. Just like Gee, Hall (2000) believed that the individuals' identity could be a representation of who they are, not necessarily their own selves.

Even though the individuals' identity is possibly different due to how they represent themselves, these identities still make up the individuals. For example, we have multiple real-world identities, like me, "Amelia Jati Robert Jupit", a mother, daughter, lecturer, student, wife, Iban-Chinese descent and movie enthusiast, among other identities. Gee did not further explain which of these real-world identities play as the virtual identity, or how the real-world identities play a part in choosing the virtual character to play and how they decide what to do in the game. Furthermore, players' real-world identity and their virtual or in-game identity could potentially be different than what they wanted to represent themselves and Gee did not elaborate much on this matter. Thus, it would be useful to gather the empirical evidence needed to either support or contradict not only Gee's theory of identity but also from other identity researches as well.

Regarding the projective identity, Gee suggested that players go about this is by making the kind of person they wanted their virtual character to be, and with the history they wanted the character to have. As a result of this making, projective identity was thought to surpass the limitations of what both real-world person and virtual character can do in the game. Gee focused his work on this projective identity because he believed that how the game progressed would depend on the collaboration between the real-world player and the game character, within the confines of the game designs and rules. In a nutshell, projective identity is how the real-world person interacts with the virtual character.

Furthermore, Gee suggested that players' formed their projective identity when they wanted their character to have certain qualities and history in the game. The construction of those qualities and history were based on their values and knowledge of what their game character could become. The projective identity comprised three aspects, which are gaming expertise, authentic professional expertise and developmental capacity (Gee, 2005b). In the first aspect, the projective identity is a combination of players who use their gaming skills to move their character through timing and game controls, and the character who knows how to manoeuvre within the game world. Gee used his experience playing as Alucard, a character in the game *Castlevania* to illustrate this first part of projective identity (Gee, 2005b). Alucard, the character was designed with the knowledge to move and fight in the game, whereas Gee as the player knows how and when to

command Alucard to do so. Both of Alucard and Gee's gaming expertise are needed to play the game as neither of them can play with just their expertise.

The projective identity could then be further unfolded through both players and character's authentic professional expertise where they share "a system of professional knowledge, strategies, and skills" (Gee, 2005b) to excel in the game. Using the game Full Spectrum Warrior as an example, Gee stated that both players and character (in this game, soldiers) form a joint authentic professional expertise to navigate in the game. Full Spectrum Warrior requires the soldiers-players blend to view the game world as paths to take when going from cover to cover (such as cars, objects and walls), to avoid being under enemy fire (Gee, 2005b). Players change their needs and desires so that they could take the necessary actions to perform their best. In the game, players use objects like cars and walls as covers so that they could prepare their attack or defending themselves behind these covers. Using both the players' knowledge, strategies and skills, and the character's body and programmed skills, players can project their desires, goals and actions onto the virtual character.

As for the third aspect of projective identity, players and character can develop their abilities to acquire new skills and strategies to use over their time spent in the game (Gee, 2005b). For character development, Gee believes that it is not sufficient for just having a character age nor having the character to look older. Instead, players play a vital role to develop the character and choose when, where and how they want their character to be over time. Together, players and character would play out their developmental capacity and create their personal history, a unique game story of their own. Players' shared developmental capacity with the character allows them to change and obtain new skills which they could use alongside the strategies that they have planned throughout their gameplay. Using the game Rise of Nations as an example, Gee stated that players play from a god-like perspective, looking down on the whole game world as there is no one character for players to assume. Instead, players get to control the many characters such as farmers, soldiers and builders to help build the nation (Gee, 2005b). In the game, players get to build buildings in their territory, gather resources and develop technologies. Over the course of the game, players can expand their territories by strengthening their economy and military capabilities. With different nations (for example Greece) and ages (for example ancient, modern and information) to choose and play, players can develop how they wanted their game experience to be ('Rise of Nations/Units', 2020).

With all being said about the projective identity theory, there was no other empirical evidence of Gee's account on identity formation, except by his personal accounts. From his experiences, Gee inferred that the community of players who play the same games as

he did such as *Castlevania*, *The Elder Scrolls III: Morrowind*, *Full Spectrum Warrior* and *Rise of Nations* would have formed their projective identity as he had outlined. Hence, there was no valid proof yet whether his idea of projective identity held for the game community as a whole.

One researcher who subscribed to Gee's identity theory, focused on studies with only four players of varying playing experiences in three RPG: *The Elder Scrolls III: Morrowind*, *The Elder Scrolls IV: Oblivion* and *Fallout 3* (Waggoner, 2009). However, his studies centred heavily on the real-world and virtual identities of the players in identifying with their avatars in RPG. Unlike Gee, who drew from his experiences playing games that appealed to him, Waggoner imposed the games on two of his participants who were less inclined to play the RPG genre. The two players who were more experienced RPG-players identified more with their avatars than the other two players who did not. The latter two were not willing to identify with their avatars out loud even though they had projected their real-world identities onto their avatars unaware. Although their projective identity was formed in the game, it did not seem to be meaningful to the players themselves. Their reservations could be due to the games that they played in were chosen for them and not of their volition. Furthermore, Waggoner's study using Gee's identity theory was only restricted to the RPG genre and thus offer no illumination on players' identity in other game genres.

In recent years, Hellman and Majamäki (2016) conducted a study on players' projective identity and their masculinity constructs in their application into the MMORPG community. The MMORPG players who wanted to join the community had to fill out a membership application form with basic information such as their age, gender and hours of gaming. Additionally, the players were invited to describe themselves as individuals and players in the given form. Hellman and Majamäki (2016) analysed these players' self-description to investigate how the players presented themselves through their description particularly how their masculine identities were represented in the MMORPG. The authors found that players expressed their masculine identities in their motives to join the MMORPG community. The players had wanted to be part of a social group and believed that they could contribute to the MMORPG community as well as have a positive gaming experience with the community. The authors believed that their findings are in accord with Gee's concept of projective identity where players had projected their hopes and expectations onto the MMORPG community. In their paper, the authors had neglected to mention which analysis method they had employed when they coded the players' self-description regarding their projective identity and masculinity constructs. Even though they believed that their findings support Gee's concept of projective identity,

the results would have more validity with a known analysis method instead of a generic coding practice. Their analysis was based on players' self-description, which resulted in a comprehensive description of players as a potential co-player and friend in the MMORPG community. Therefore, the findings lack the information whether the players will project their identity in the game the same way as they had described in their application into the MMORPG community.

## 2.6 Summary

Many game research have focused on players' identity in games with playable characters from different aspects: character and avatar customisation, gender exploration of characters and narrative settings. These researches centred on games with playable and visible characters such as those found in RPG, FPS and MMO genres. Gee (2003, 2005) on the other hand, did not focus on specific genres, and presented his take on players' identity from the games that he played in. The games that he played in included those that had no playable characters, in particular, *Rise of Nations*, a real-time strategy game, where players could build and expand territories in the game. Gee (2005b) proposed that players' identity in such game was an amalgamation of both players and the god-like role that they played as to develop the abilities and skills needed over time in the game. Rigby and Ryan (2011) stated that the identity of players in strategy games were instead implied through their actions and strategies as there was no observable character that players could play as.

Instead of using the term character or avatar identity, Gee coined the term 'virtual identity' to encompass the character role in various game genres to accommodate games that have no playable and observable characters. His theory of players' identity stemmed from his personal experiences in games and did not have any empirical evidence to support his theory. Waggoner (2009) did attempt to provide the empirical work for Gee's theory, but like many other researchers, Waggoner only focused on a particular game genre. Current studies on players' identity in digital games have only centred on certain aspects of identity and was not put together under an overarching theme of what identity in digital games is. Gee could possibly have come close to what player's identity is but lacked the evidential support for it.

Identity in games concerns both individuals (players) and games, and as such we would need to consider players' experiences in relation to their identity in games. Researchers who employed measurement scales to measure identification in games have claimed to have found support for players' identity in games. However, the measurement scales used

were questionable as there were no accounts of players' perspectives taken for the scales. There was also no mention on any feedback from players on their experiences with games prior to the construction of the measurement scales. Consequently, these studies failed to hit the mark on what players' identity is in games.

In my study, I aim to gather empirical evidence of projective identity in games while deliberately not being constrained by genre. I am doing this through the gathering of a variety of players' experiences across a variety of games. By studying players' experiences through data collection and analysis, I will have the empirical evidence needed to either confirm or refute Gee's concept of projective identity. As players' experience with games allow them to form their identity, there is more than just identifying with their characters like many studies have claimed. My research is to investigate how players go about this when they play their games.

## Chapter 3

# Identity Formation Study

Digital games allowed players to play a role and identify with the characters that they played in RPGs such as Final Fantasy and The Elder Scrolls series. Players have identity autonomy where they can choose how to develop their characters throughout the game, which activities they want to pursue and plan strategies to overcome challenges (Rigby & Ryan, 2011). They could also identify with games from other genres, for example, Call of Duty (first person shooter) and Need for Speed (racing) series (Klimmt et al., 2010). In strategy games like Civilisation and Total War series, players' identities were implied through their actions and strategies (Rigby & Ryan, 2011). Regardless of game genre, Gee suggested that identities existed in games through the players' real-world identities, character's identity and projective identity which combined both players' and character's identities (Gee, 2003a).

Psychology scholars have widely studied identity for many years, which resulted in the different aspects of identities such as ego identity (E. H. Erikson, 1968/1994b), personal identity (Tajfel & Turner, 2004; E. H. Erikson, 1968/1994b), self (Higgins, 1987) and social identity (Tajfel & Turner, 2004). One of the early researchers on identity, Freud (1940/1969) conceived several notions of identity through the id, ego and superego in which individuals continuously shaped their actions and behaviours based on the responses received from society. In the media discipline, Feilitzen and Linné (1975) has defined identity as two different types of identification: similarity and wishful identification (Konijn et al., 2007). In one game research, players were found to alter their self-perception as a way to identify with characters where players' perceived their game characters to be closer to their ideal self, rather than their actual self (Klimmt et al., 2010). Another game research proposed three dimensions of identity, which are avatar identification, group identification and game identification (Van Looy et al., 2012).

In his books, Gee described how players can form the three parts of identity, which are

real-world, character and projective identity (Gee, 2003a, 2005b). However, his tripartite identity was based on his experiences playing games across genres. This study aims to determine whether his work is an accurate description of other players' experiences as well. Hence, this study aims to investigate how players think of their experience and identity in games. Like Gee, instead of focusing on a single genre game, this study comprises players' experiences in multiple game genres. In this study, I have interviewed players on their most memorable game that they have played in regards to their identity formation in digital games. Having players to talk about their favourite games would bring the discussion on their experience to a more personal level and provide valuable insights on the process that Gee discussed as leading to projective identity.

The main finding was that players formed an identity in games through the meaningful choices that they made throughout their gameplay experience. Specifically, players project their identity through the meaningful choices that they make when they play. Hence, this provides empirical support for the formation of Gee's concept of projective identity in players.

### 3.1 Methodology

The different concepts of identity formation in literature led me to my study using a qualitative approach, the grounded theory to find out the way players formed their in-game identity when they play. This qualitative approach helped guide the data collection and data analysis to develop a grounded theory on player's forming their in-game identity. The interview method during the data collection was used to gather a rich data of information about players' experience of gameplay in their favourite game. After each interview session, the data was analysed which would then direct the next set of interviews (Corbin & Strauss, 2014). This method of analysis was essential in working towards a grounded theory on identity in digital games. Even though there have been many types of research done on identity in digital games, these studies have only covered specific game genres such as role-playing, strategy, MMORPG, racing, and shooting games. Thus, by using grounded theory method, it was hoped that a theory driven by the data would be generated and emerged on the identity formation of players in digital games. More on this in Section 3.2.

#### 3.1.1 Participants

Through this qualitative study, a total of nine participants were recruited via theoretical sampling. Theoretical sampling was used in the study, as I am interested in whether

players' experiences were similar across different game genres. Before recruiting each participant, they were asked if they had a favourite game and what the game genre was. These line of questions were asked so that the study would cover a variety of genres instead of just one genre as covered in most studies. Friends and friends of friends who were experienced players were recruited based on the different game genres of their favourite games. One participant was also recruited through an ad posted in a Facebook group with the message looking to interview people whose favourite computer or video games were from the arcade, adventure, racing and other genres. As a result of these samplings, I, as the researcher knew almost all the participants personally. Nevertheless, all interview sessions were conducted in the same friendly manner over hot drinks and chocolates (except one participant who just accepted the chocolates) in an informal environment, to encourage a free flow of conversation.

There were seven male and two female participants between the ages of 22 and 32 years. These participants came from Bulgaria, Cyprus, Germany, Malaysia, Russia and the United Kingdom. All of the participants were postgraduate students from University of York except for Participant 7, who worked as a staff at the university. Their favourite digital games came from a variety of game genres which included first-person shooter (FPS), third-person shooter (TPS), role-playing game (RPG), massively multi-online role-playing game (MMORPG), strategy, endless runner, board, racing and action-adventure. All the participants have played digital games for more than ten years with five of them having played for more than 20 years. In the case of Participant 4 and Participant 7, they each shared about their gaming experience playing with their respective partners. Participant 7 had listed three favourite games in the demographic questionnaire (See Appendix B) and therefore talked about all of his three favourite games during the interview. His favourite game Flappy Bird is from the arcade genre, OLO from the board genre and DrawRace from the racing genre. See Table 3.1 for the participants' demographics data.

<b>Id</b>	<b>Age</b>	<b>Gender</b>	<b>Country</b>	<b>Favourite Game(s)</b>	<b>Game Genre</b>	<b>Playing Experience</b>
P1	22	Female	Russia	Fallout 3	RPG	>10 yrs
P2	27	Male	United Kingdom	Red Orchestra: Ostfront 41-45	FPS	>20 yrs
P3	23	Male	Bulgaria	World of Warcraft	MMORPG	>10 yrs
P4	27	Male	United Kingdom	The Elder Scrolls: Oblivion	RPG	>20 yrs
P5	32	Male	Germany	Mass Effect series	RPG, TPS	>20 yrs
P6	25	Male	Cyprus	Football Manager 2012	Strategy	>10 yrs
P7	28	Male	United Kingdom	Flappy Bird, OLO, DrawRace	Arcade, Board, Racing	>20 yrs
P8	27	Male	Malaysia	Oddworld: Abe's Oddysee, Oddworld: Abe's Exoddus	Action- adventure	>20 yrs
P9	31	Female	Malaysia	Subway Surfer	Endless Runner	>10 yrs

Table 3.1: Demographics of Participants Interviewed

### 3.1.2 Brief Description of the Favourite Games

Here, I will briefly describe eleven of the participants' favourite games. The descriptions of the games below are from external perspectives about the game from game developers, ratings and reviews websites, and as such are not from the participants' experiences shared during the study. These descriptions are written so that readers will have an idea of how the games are played and viewed by other players. On top of that, with these descriptions of the games, it is hoped that readers will be able to relate the participants' accounts with the analysis in Section 3.4.

#### Fallout 3

Fallout 3 is an action role-playing game developed by Bethesda Game Studios, set within a post-apocalyptic environment (Wikipedia contributors, 2020b). When players first start playing the game, they can choose their appearance, gender, name and race. Additionally, players can choose a set of S.P.E.C.I.A.L. attributes which consists of Strength, Perception, Endurance, Charisma, Intelligence, Agility and Luck ('Fallout 3 Walkthrough - GameSpot,' 2020). Fallout 3 provides an opportunity for character development as players started their gameplay when their character is at the infancy

stage. The players' character then grew up in one of the nuclear fallout shelters until one day, the character's father disappeared from the shelter (Wikipedia contributors, 2020b). The players are then tasked to find the character's father and why he left the shelter. Throughout the game, players go on quests and develop their character's skills that would help them to fulfil their objectives. Figure 3.1 shows a screenshot from the Fallout 3 game.



Figure 3.1: The character walking through the post-apocalypse wasteland (Horti, 2018)

### **Red Orchestra: Ostfront 41-45**

Red Orchestra: Ostfront 41-45 is a tactical team-based multiplayer first-person shooter game that was developed by Tripwire Interactive (Wikipedia contributors, 2020i). When players start the game, they can choose which Eastern Front battles during World War 2 to fight. Additionally, players can choose one of the 28 infantry weapons or even crew one of 16 armoured vehicles to fight in the battle ('Red Orchestra: Ostfront 41-45 (Game) - GiantBomb', 2020). However, these choices or weapons or vehicles are on first-come, first-serve basis as many players are vying for the better weapon or vehicle. To win the game, players need to capture all their objectives, such as areas on the maps that range from farmhouses to hilltops ('Red Orchestra: Ostfront 41-45 (Game) - GiantBomb', 2020).

### **World of Warcraft**

World of Warcraft (WoW) is a MMORPG developed by Blizzard Entertainment and released in 2004. When players first begin playing WoW, they would need to create a character that would be their avatar, which is how their character's appearance in

the game (Blizzard Entertainment, Inc., 2020). In setting up their character, players would need to choose a race that would decide how their character would look like, such as humans, high-elves and centaurs. Their chosen race would then determine which faction they would be in, whether in the Alliance or Horde faction. After that, players would need to select the class for their character, such as mages and priests (Wikipedia contributors, 2020l). Players can go on quests like gathering specific resources, locating objects or even getting rid of the Undead at Stratholme (Blizzard Entertainment Inc., 2020). Additionally, players can opt to go on solo, group or PvP (Player versus Player) quests among many other quests ('Quest - Wowpedia - Your wiki guide to the World of Warcraft', 2020).

### **The Elder Scrolls: Oblivion**

The Elder Scrolls: Oblivion is an open world role-playing game developed by Bethesda Game Studios (Wikipedia contributors, 2020k). Open world in the game context means that players can explore the game world and freely make their quests instead of strictly following the main game quest (Wikipedia contributors, 2020h). Like many RPG, players can customise their character appearance and then choose a class for the character such as mage, elf and orc. Players who choose to follow the main quest are tasked by the emperor of Cyrodiil to search for his illegitimate heir (Kasavin, 2006). The emperor was then assassinated, which made finding the heir the main quest of the game because, without an heir, the realm to Oblivion is open, causing an invasion of magical creatures that will kill and destroy everything in Cyrodiil. Alternately, players can follow the side quests, fight against monsters, talk to non-playable character (NPC) and even travel anywhere and anytime in the game world that are non-specific to the quests (Wikipedia contributors, 2020k).

### **Mass Effect**

Mass Effect is an action role-playing game series that was developed by Bioware. Players get to play as Commander Shepard, the protagonist of the game, who they can then choose the commander's gender and personality (Wikipedia contributors, 2020e). They can choose where to go, who to kill and what to buy, in addition to choosing whose side they wanted to be with, who to alienate and what sort of information to persuade from someone from the dialogue wheel (Biolsi, 2019). In Mass Effect, players can travel across the galaxy and align themselves with allies so that they could defeat the enemies. This alliance, along with advance technology and weaponry would benefit players to counter enemies that threaten to wipe out all life in the galaxy (Electronic Arts Inc,

2020). See Figure 3.2 for a screenshot from the Mass Effect game.

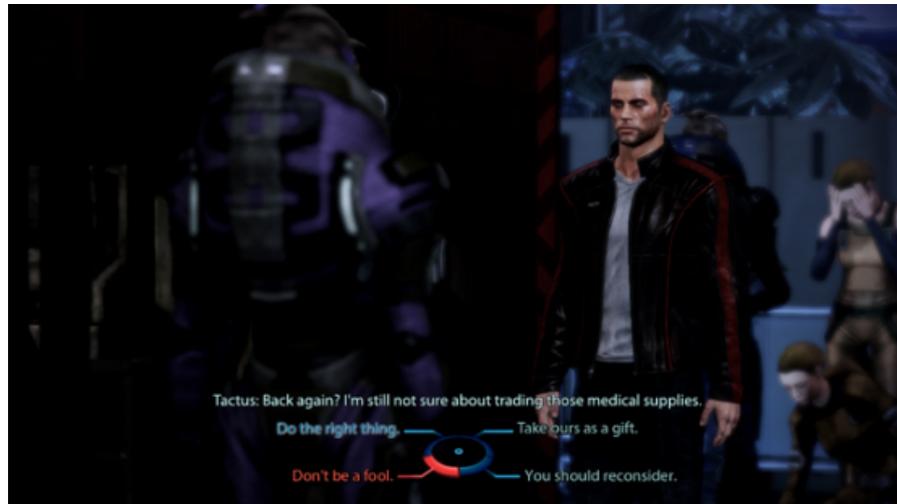


Figure 3.2: Players can choose the conversation from the dialogue wheel (Serialhobbyiste, 2015)

### Football Manager 2012

Football Manager 2012 is a management simulation game developed by Sports Interactive. In this game, players play as the team manager who will manage a professional football club such as Arsenal, Everton, Chelsea and Aston Villa (Wikipedia contributors, 2020d). Football Manager 2012 simulates the real-world management of a professional football club. Among the many things players can do as a team manager are to get football players to sign contracts, manage the club finances, deliver team talks and interact with players, and train the football players for game day (Wikipedia contributors, 2020d; Gamespot Staff, 2011).

### Flappy Bird

Flappy Bird is a mobile arcade game that was designed by Dong Nguyen and released in 2013 (Wikipedia contributors, 2020c). In this retro-looking game, players can manoeuvre a yellow bird to fly safely through the gaps between the pipes (Rigney, 2014). Players need to tap on the bird to keep the bird flapping its wings, thus avoiding it falling to its death. The faster players tapped on the bird, the higher the bird would fly (Kushner, 2014). For each pipe cleared, players will receive one point for their effort. Although the game may look simple, players found it hard to maintain the bird in mid-air and avoid hitting the pipes as well. Despite the difficulty, players found

the game addictive and out of guilt, Nguyen removed it from the game stores in 2014 (Rigney, 2014).

### OLO

OLO is a social board game that was developed by Rogue Games and released to the app store in 2012 ('Olo game for iPhone/iPad Reviews - Metacritic', 2020). This mobile game can be played with two or four players, and even online with other players over the internet ('Olo', 2020). In OLO, players need to flick their designated coloured OLO, depicted as circles into their target zone. For example, as seen in Figure 3.3, Player 1 needs to flick any of their three red OLOs to the red zone, while Player 2 needs to flick any of their four blue OLOs to the blue zone. Players can also push their opponent's OLOs out of their target zone as the winning player would have as much OLOs as they can get in their target zone.

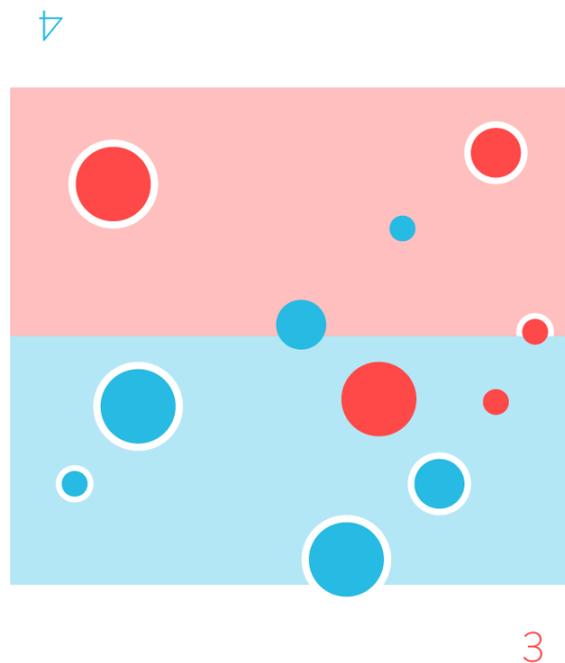


Figure 3.3: Player 1 with three red Olo lives versus Player 2 with four blue Olo lives left ('Olo', 2020)

### DrawRace

DrawRace is a line-drawing racing game developed by RedLynx and released to the

iOS platform in 2009 (Wikipedia contributors, 2020a). In the game, players need to draw a line along the race track where they would want their car to follow the path line. If players draw the line fast, their car will race fast. On the other hand, if players draw the line slow, their car will race at a slow pace. However, if they draw the line too fast near a curved road, their car will risk losing its grip on the race track. After finishing drawing the line, players' car will race along the line that players have just drawn with two other computer-controlled cars in the race. Figure 3.4 shows the line that a player had drawn on the race track.



Figure 3.4: Line drawn on the race track for the players' car to follow in the race

### Oddworld: Abe's Oddysee

Oddworld: Abe's Oddysee is a platform game developed by Oddworld Inhabitants and was first released in 1997 (Wikipedia contributors, 2020g). In the game, players play as Abe, a Mudokon slave whose race was enslaved by the Glukkons ('Oddworld: Abe's Oddysee - The Walkthrough King,' 2020). After he had heard about the Glukkons' plan to kill the Mudokons for their meat, Abe planned to rescue the Mudokons from their fate. To save the Mudokons, players need to solve puzzles, manoeuvre around obstacles and avoid being killed by enemies (Wikipedia contributors, 2020g). The number of Mudokons that he saved throughout the game will determine his own fate at the end of the game.

### **Oddworld: Abe's Exoddus**

Oddworld: Abe's Exoddus is a platform game developed by Oddworld Inhabitants, just as its predecessor, Oddworld: Abe's Exoddus (Wikipedia contributors, 2020f). The game was first released in 1998 and followed the narrative of its predecessor. In this game, players play as Abe to rescue the Mudokons from another evil plot by the Glukkons. This time, the Mudokons are at risk of being harvested for their bones and tears to produce a type of drink called the Soulstorm Brew. To save the Mudokons, players need to solve puzzles such as activating and deactivating mines, controlling mine cars and picking up items to be used for other purposes (Wikipedia contributors, 2020f). Just like the previous game, Oddworld: Abe's Oddyssey, the number of Mudokons that Abe saved will affect his fate at the end of the game.

### **Subway Surfer**

Subway Surfers was released in 2012 by Kiloo and Sybo Games (Wikipedia contributors, 2020j). This endless runner game was released for Android, iOS, Kindle, Mac OS and Window OS platforms. In the game, players play as a young graffiti artist who runs away from the inspector and his dog through the train tracks because the character was caught spraying graffiti paint on the train. As the character runs through the train tracks, players need to manoeuvre the character to collect gold coins, power-ups such as jetpacks, magnets and power jumpers, and other items. Simultaneously, players need to avoid stationary and oncoming trains and objects by either moving to the left, right or even jump over short hurdles (Wikipedia contributors, 2020j). Players can accumulate their scores by collecting the coins and special items when they run the tracks.

### **3.1.3 Interview Schedule**

The initial goal of the interview was to discover the participants' gaming experience in their favourite games (see Appendix C). By focusing the interview on the participants' favourite games, participants tended to express more in discussing games that were memorable to them as the experiences had the most impact on their gaming experience. In the initial interview schedule, the questions arise from literature, particularly in players' identification with character and avatar such as Van Looy et al. (2012), Klimmt et al. (2009), Rigby and Ryan (2011), Gee (2003a). These researches have discussed how players can identify with the characters in the game. Moreover, the researcher designed the questions to understand how players' experiences in their favourite games have relevance to how they identify with their character, and in extension, how they can

form their identity in the game. Questions asked during the interview are semi-structured such that the following areas were covered but not limited to:

- (a) How do you know what to do when you start playing the game?
- (b) Did you choose a character to play with or was it picked out for you?
- (c) Have you tried playing as different avatar/character?
- (d) What are the skills that you acquire when playing as the character?
- (e) Do you think you have completed the game?
- (f) Was there only one way to complete the game?
- (g) What do you like so much about the game?
- (h) What do you feel when you are done with the level (in the game)?

In the interview, there were no direct questions about how the participants form their identity, particularly Gee's concept of projective identity or about their identification with the character or even the game itself to avoid any bias in participants' responses. Instead, the researcher asked the participants about their attachment with their character and the game, what made the participants play their favourite games with such attachment and how they go about completing their game, and so on. The interview questions emerged and evolved as the data collection goes (see Appendix D for the final interview schedule). In line with the grounded theory method, questions asked during interviews were revised from one interview to the next as data was analysed for relevant cues to direct the following interview. As a result, this study was very much led by the data.

#### **3.1.4 Procedure**

Before the interview session, participants were asked to read and sign the consent form in which information included the purpose of the study and ensuring the anonymity of the participants (See Appendix A). Participants were also given a demographic questionnaire for further information on their gaming experience (See Appendix B). They were informed that the interview would be recorded for data analysis purposes. Each interview session lasted for approximately 45 - 90 minutes (except one participant whose interview lasted approximately 19 minutes). All interview sessions were conducted in a game room at the department except for one participant who requested for the interview to be held in the office room instead.

At the end of the interview sessions, participants were invited to ask any questions related to the study and audio recording were turned off at this point onwards. There were two sessions where the audio recording was turned back on with the participants' permission for the post-interview session. Data collected during this session was transcribed and analysed as well. Participants were offered warm beverages and chocolates as a token of appreciation for their time spent on this study.

### 3.1.5 Transcription of Interviews

Garageband, a Mac OSX built-in recording software was used to record the interview session. Additionally, Voice Memos app was used to record the interview on an iOS platform for backup recording from the sixth interview session onwards. An important note on the fifth interview session, audio recording into the first half hour of the interview was corrupted and thus was not able to be transcribed. However, much of the content from the 'lost' interview could be replicated in the following recordings.

Transcription of the interviews began after pleasantries were made, and the conversation entered into questions about the participants' gaming background. Pauses and prolonged pronunciation on the last syllable of words were noted as '...' in the transcriptions. Commas and period marks in the text were approximated as closely as possible to the participants' responses. Conversations and texts from the game were given in quotes to differentiate them with the participants' normal responses. '\*\*' used in the transcription was denoted for inaudible or mumbled responses during the interview. In the instance where '\*\*' was present in the data, the sense of what has been said in the sentence was understood from the context it was described during the interview. The playbacks of all the audio recording had been carried out at least three times to ensure a thorough transcription process.

## 3.2 Grounded Theory

Grounded theory helped to explain the phenomena that was going on in the data collected. The method allowed the researcher to explain and revise the grounded theories when the next data collection acquired new knowledge (Corbin & Strauss, 2014). Also, the grounded theory method helped to gain new insights on how players formed their in-game identity through their experiences with games. When constructing a theory from the data collected in this study, grounded theory directed the investigation to look at players' experiences precisely in their identity formation in games. Grounded theory undergoes a rigorous cycle of data collection and analysis to form concepts and categories

related to players' identity. When there are no more new concept to be formed, the data collection would then be concluded.

In the study, the data collected for the grounded theory came from all nine interview sessions. After each interview session, the audio recording was transcribed and analysed right after to steer the direction of questions in the next interview. The data was then conceptualised and categorised iteratively until a theory on players' identity emerged. Only parts of the interview that were related to participants' experiences with games were analysed for conceptualisation and categorisation.

In the transcript, the researcher has identified concepts and categories and decides how to fit new data from subsequent interviews to fit in with existing concepts and categories. If the new data does not fit in with the existing concepts and categories, the researcher would then form new concepts and categories to fit the new data. Afterwards, the questions in subsequent interviews were asked to corroborate players' experiences found in the previous data collection. This iteration of data collection had concluded when there were no new concepts to be derived and no new theory to be formed. As a result, the theory has become saturated and is now grounded that encompasses all of the participants' experiences regarding their identity formation in the game.

In grounded theory, the analysis phase involved three major coding stages, which was designed by Corbin and Strauss (2014): open coding, axial coding and selective coding. In the first stage, open coding consisted of the interview data being broken down into concepts. After that, the data concepts were grouped into categories depending on its properties and dimensions of the players' gaming experience. Secondly, in the axial coding stage, the resulting categories from open coding were then interrelated to each other in a more specific way through its corresponding subcategories. In selective coding, the central theme was selected which would then relate all categories concerned having gone through the process of refinement and validation of categories and its subcategories.

Even though there were three different coding stages, they could take place in parallel with each other. From the first participant (P1)'s interview transcript, the researcher had highlighted texts that are relevant to how players form their identity and then label them with their corresponding concepts. Then, the researcher transferred all the concepts and corresponding texts into a spreadsheet, with its sheet labelled with the participant identification number. After that, the concepts are sorted alphabetically to identify unique concepts coded for P1. As a result, there were 22 unique concepts coded from P1's transcript such as 'development of skills', 'preference of style of play', 'preference of character' and 'preference of name'.

As for the second interview transcript (P2), coding on P2 transcript was done by

checking if the codes used in P1 were relevant for P2 as well. If the codes used in P1 were not applicable, then new codes are given for the highlighted text for P2. At the end of the coding stage for P2, there were 38 codes altogether which comprised six similar codes with P1 such as ‘preference of character’ and ‘preference of style of play’, and 32 new codes, for example ‘acceptance of character’ and ‘role’. At this stage, there were now 54 codes in the pool of codes to be used for coding. The coding process was then repeated with the next participant, P3’s transcript by comparing with the 54 codes, whether they were relevant with the highlighted text or not. At the end of P3’s coding stage, 38 codes comprised 20 similar (e.g. ‘preference of appearance’, ‘preference of character’) and 18 new codes (e.g. ‘preference of mission’, ‘sense of completion’) were produced. Thus, the number of codes in the pool was 72 codes to be used for the next participant, and the coding process was reiterated for the rest of the participants. These codes may be naive in making and simplistic but as the grounded theory process goes, the coding process has been built towards a mature analysis.

Following the coding of each of the transcripts of the participants, the concepts were then categorised to apply to the identity of the players. Given an example of an initially formed category, concepts such as ‘preference of appearance,’ ‘preference of character’ and ‘preference of style of play’ were categorised under the category ‘personal preference’. However, some of the definitions and categories were modified because the codes were not precise enough to describe the players’ experience. Thus, the concepts and categories were renamed to fit better with the corresponding texts, such as from ‘preference of appearance’ to ‘make the character look like a player,’ ‘preference of style of play’ to ‘styles of play,’ and ‘personal preference’ to ‘form self-representation in a character.’ Concepts have been re-categorised to ensure that they are relevant to the corresponding category. As definitions and categories were developed, some definitions such as ‘preference of skills’ and ‘self-ranking’ were discarded because these concepts had become irrelevant to the data.

All concepts and categories were iteratively refined as the data was collected for each interview. Such refinements of concepts and categories were necessary to ensure that the data is about the formation of players’ identity. These refinements then lead to the saturation of the theory, where there were no more newly formed concepts in the recently collected data. In total, there were 87 concepts developed over the nine interviews. After the initial stage of analysis, the concepts were then refined to 18 concepts that are related to the theory of players’ identity formation in digital games. These concepts (or subcategories) and categories will be shown in Sections 3.3 and 3.4. A written report on the theory was also presented to players who were involved in this study for review and

validation.

### 3.3 Meaningful Choices in Projective Identity

The central theme of the theory on players' projective identity in digital games lies in the meaningful choices that players make throughout their gameplay experience. Players project their identity through the meaningful choices that they make when they play. The meaningful choices that they make are significant to them as it is an extended expression of themselves. They can choose how to express themselves in the game, from when they start playing to how they complete their gameplay. These choices then ultimately shape their gaming experiences, which is unique to the players themselves. In Figure 3.5, meaningful choices are shown as the central theme in players' projective identity in digital games.

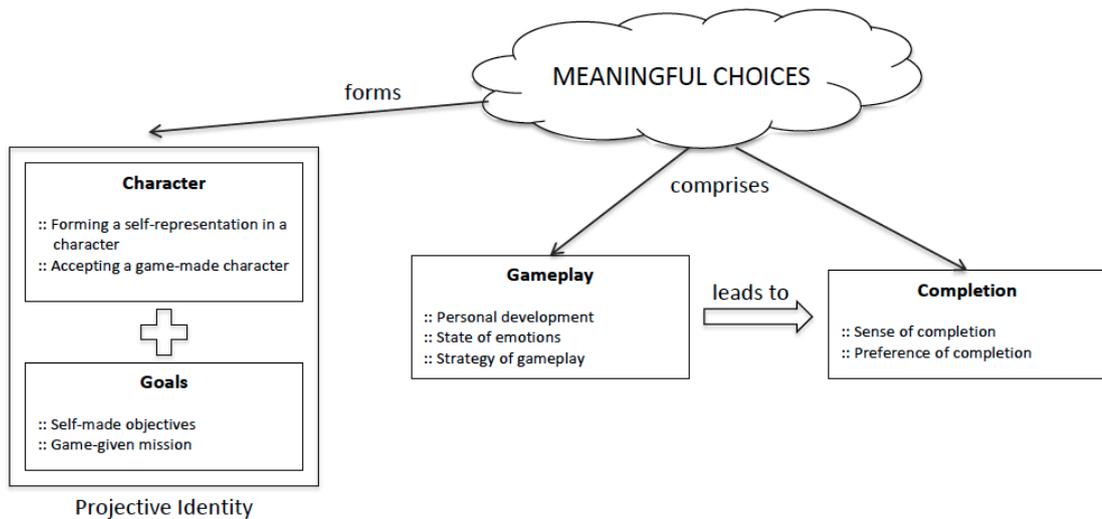


Figure 3.5: Meaningful Choices, being the central theme of the grounded theory, a key to players' identity in digital games

Having a hand in their gameplay is vital to the gaming experience as players get to determine what they want to do, where they want to go and how they want to do it in the game. This freedom, which could be limited by the game design, allows the players to make choices that are meaningful to them, making the gaming experience their own. Thus, when playing, players do not conform to other experiences apart from their own.

For example, in a game where players can customise their character, they can choose their character's appearance, race, class or even skills. In another example where there is a predetermined narrative that players have to follow, they are still able to make choices in the game such as choosing how to carry out missions and strategise the best way to achieve their goals. The ability to make choices allows players to play the game in their way as much as it can be allowed by the game itself.

Projective identity in games offers an opportunity for players to choose their path that would be meaningful in the game. As illustrated in Figure 3.5, their meaningful choices help to form the character and goal aspects of their playing experience that are considered as their projective identity. Players' meaningful choices during gameplay then lead to how they choose to complete the game as they see fit for themselves.

In the first aspect of the grounded theory, players can choose the character that they want to play throughout the game. They can personalise the character such that the character represents them in the game. This can be done either through similar appearance, name and projecting their personal values onto the characters. Conversely, some players choose to accept the default character offered by the game. This happens in games where there is a limited selection of choice of characters to play as or no choice at all. Even though players are not always able to personalise their character through appearance and name, the actions, decisions and moves carried out by the character are of their choosing and making, albeit constrained within the game environment itself. There are also players who choose to play with pre-made characters that they can identify best with themselves. With this in hand, they want to see what they can do with the character and where and how the character will take them in the gameplay.

Secondly, there are two concepts that encompass the goal aspect of meaningful choices which are the game-given mission and self-made objectives. When the game gives players the mission, again players are given the opportunity to choose either to carry out the mission or not. Should the mission be something they do not want to follow through or something they can hold off for a time or even if they would need to perform certain tasks, players can choose to make their own mission by carrying out their own objectives. This way, players make their own path the way they want to experience in the game. There are also games where there are no clear instructions on what players are supposed to achieve. In this scenario, players would play by ear first and then will set themselves goals once they are acquainted with the basic rules and controls of the game.

The gameplay aspect of meaningful choice theory would involve the personal development of players, the various states of emotion experienced by players, and their chosen strategy of winning the game. In personal development, players make choices that

are meaningful to them when they develop their skills, character and story so that they can earn in-game rewards. Secondly, players go through various emotional states while playing, as they allow themselves to get attached to the characters by having spent time and effort being close to either their assumed role or NPCs that they met, and allow themselves to enjoy the game. These emotional attachment and enjoyment are the ones that players have chosen to experience because how they wanted to feel in the game can affect their next decision and action to achieve their goals.

Thirdly, players are making strategies so that they can win, preserve the life (lives) of their character and use their styles of play. Another part of the gameplay aspect includes players' being competitive when they play, which helped push themselves forward and upward in the game. Players wanted to go beyond just being competent in their gameplay, and seek to be on top of their game. Whether they are playing against other players or only themselves, players wanted to not only succeed in their pursuits but being better in their gameplay. Being competitive in their gameplay helped players to strategise the better way to fulfil their objectives and overcome challenges faced in the game. All these choices made in the pursuit of personal development, the emotions that they chose to feel and the strategies that they wanted to implement, are meaningful for the players to achieve their goals through the agency of their characters in the game.

As players' gameplay reaches its conclusion, how players choose to complete the game depends on their perception of completion. There is no one way to complete a game, as there are many factors that need to be taken into consideration to reach the end game per se. The hows and when the game ends are based on the players' actions and decisions throughout their gameplay. Players have determined for themselves how they want to complete the game at the conclusion part of the game. Those who complete the game to their own chosen preferences do so in a way that they feel that they have a hand in this. There are also players who decide for themselves that they have completed the game, even though they have not completed the actual game as designed by the game designers. These players have their sense of how and when the game is complete, have chosen the time and place (as in which part of the game) that they feel they can leave the game feeling positive, where the game allows them to do this. These choices that players made in regards to how they feel that they complete their gameplay are meaningful to them as the consequences of their choices affect the next steps or stages in the game.

Therefore, players do not merely make choices about their gameplay and the completion of their gameplay. Instead, they make those choices that could affect the development of their characters, the onslaught of emotions that they will experience when something happens to their character, the NPC or just the overall gameplay experience,

the strategy players have planned for the short and long term of the gameplay, and how they wanted to conclude their gameplay.

Making meaningful choices throughout the game is of importance to players as they choose where the game takes them in the game. Every path and decision made in the game is made liable by the players' own making. They would not have played the game in the beginning if they so chose it. Players make choices that are only as meaningful to them as they are accountable for any consequent paths and actions that follow in the game. Hence, these meaningful choices make up their experience and subsequently their identity in digital games.

The four aspects as mentioned earlier will be described further with its corresponding category and subcategories in the following section.

### 3.4 Detailed Descriptions of the Theory

#### 3.4.1 Character

At the start of the game, players get to choose the character that they can either form a self-representation where the game provides the mechanism to personalise the character or they can even choose to accept a game-made character (see Table 3.2). Although in games where there are no facilities to personalise the character, players still have the ability to choose among the characters that are available to play. Even in the event where there is no selection of characters, players can still choose to play as that character or leave the game.

Categories		Subcategories (If any)	
1	Forming a self-representation in a character	a	Making the character look like the player
		b	Naming the character with their own name
		c	Projecting own values onto the character
2	Accepting a game-made character	-	-

Table 3.2: Aspects of Character

**Forming a self-representation in a character**

## (a) Making the character look like the player

When customising their own game character, players can choose to make the character look like themselves. For example, one participant chose to go for characters who looked similar to the participant's self as the participant enjoyed "the fact that there is me running around" in the game world (P1). When this option is available to the players, they ultimately chose to make the character a representation of themselves in the character's outwardly appearance. As how the players put it:

"Mm, I typically go for characters who kind of look like me. Because I enjoy the fact that there is me running around in the Fallout world" (P1);

"I'd say that when I was playing it, my character was similar to myself in lots of ways...when I customise the character, I kinda customise the character to make it to me" (P4).

## (b) Naming the character with their own name

Players can even choose to name the character after themselves. Using their own names adds to the feeling that the players are the characters that they play as. Otherwise, they would think that the character is just "some random person" (P1) in the game world, not connected to them in a personal sense. Coupled with making the character look like the player, it is akin to "actually putting a bit of you into the character" (P4) where players feel that what happens to the character, happens to them as well. In the players' own words:

"Yes, it's just called Anna<sup>1</sup>. Just my partner's name. We were always really unoriginal with our names. I don't know why. We, they're always Anna Tom<sup>1</sup>, Anna Tom. It's always just our name" (P4);

"Yes. With your name. and it's, your name that you saw. You can put your picture also, and your date of, birth. And you can put also your favourite team. And I put the team from, [home country] and I have an inbox that's my name. And I get everyday, what happened, Premier League, other leagues, and I get mail for my football team also" (P6);

"I think it would matter if you, call the character kinda your own name and then you

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<sup>1</sup>not real name

sort of kind of think of, that characters yourself in the game” (P1).

(c) Projecting own values unto the character

Thirdly, they can project their own personal values unto the character such as being morally driven in the activities that they take part in, “the things that we would do if we’re in the world” (P4). Players also project their personalities onto the character, where they want to help the non-playable character (NPC) and other players (in a multi-player game) who they encounter in the game. As players put it:

“But sometimes you can pick up, items for free if nobody owns it. That’s okay. It’s just a little \*\* lying on, the property. But, we won’t steal. Because we just wouldn’t. There’s sort of, this red hand that comes up when you’re stealing and you know it’s not right.” (P4);

“If it’s just wasting my time, because I don’t know those people and I know I’m not going to get anything, out of it. Because, not only it’s going to waste my time, I like to do, to, spend my time efficiently but also means, somebody else might need it. I’m, gonna get his spot instead of him going in” (P3);

“Because, I don’t know, I’m not, that kind of person who like to see a sadistic person to just let them die..I’m not like that kind of guy” (P8).

(\*\*indistinct word(s))

### **Accepting a game-made character**

In games where there is no facility to personalise the character, players get to choose which of the pre-made characters that they have a strong affinity to play as in the game. There are several factors which influence their decision in this, for example “usually I play Germans coz I like the weapons better” (P2) and the “different classes have different abilities” (P3) which help weigh in the pros and cons of choosing one character over the other. In the event where players do not have the luxury to have their pick of the characters, they just accept the given character, be it a weak alien species or a teenage delinquent who sprays graffiti illicitly on trains. As the players revealed below:

“The class that you’re choosing, is based on more of internet speed and your computer speed. But getting on, the server is easy. When you’re on the server, picking your role. So if you, join a server halfway through a match, and you probably have to be rifleman, coz that’s all that is left” (P2);

“There’s a UI. So, you have an account. That’s your account. You log in to your account and then you can, create a character. And you have a list of characters when you create them.. (..) 10 classes but there’s also the determine how many characters you can.. have” (P3);

“You can change, but this is the, default ones. I always play this one” (P5);

“You just get, given the car and, it’s just blue or red. And so if you’re player 1, you’re blue car. If you’re, player 2, you’re the red car. I don’t think there’s any customisation” (P7);

“You cannot choose your, character. You can just play with one character” (P8);

“Whenever the free character, I, just choose it and I just try it one by one” (P9).

### 3.4.2 Goals

In the aspect of goals, players can either choose to follow the mission given in the game or make their own objectives and goals within the game (see Table 3.3). Missions in the game are usually given at the beginning and interspersed in the game and players can opt to focus on carrying out the mission(s) successfully. Players can also create their own mini-missions or side missions in the interest of improving their characters’ skills and abilities and aiding the completion of the main mission overall.

Category		Subcategories (if any)	
1	Goals	a	Game-given mission
		b	Self-made objectives

Table 3.3: Aspects of Goals

#### (a) Game-given mission

Game-given missions are designed to intertwine with the game story arc. Players taking on the role of the “hero” take part in these missions that determine their subsequent paths in the game. Missions are given either in textual format or implied in the narrative of the game, for example NPCs asking “you to help them because there’s a really bad guy and he kills all of these people” (P5). As the players recounted on their experiences below:

“If I don’t want to do anything, they suggest I would go and search for weapons or something like that” (P1);

“Well, yeah. Objectives. The whole world, which is littered with the lore of the world. (...) And the objectives reflect that. So, there’s this, village, from night elves, you got

attack by zombies and the objective is to, clear out the zombies. You see? (...) The objectives of the human would be to, clear out the zombies. (...) For the undead would be to clear out, to help the, zombies” (P3);

“And you as the hero has to stop, it from happening, preserve this place” (P4);

“No. there’s one in the second, part I think where you’re on a mission and on the station and then people ask, you to help them because there’s a really bad guy and he kills all of these, people, all of our people we sent so many people to catch him. But he kills, all these people. And he say, ‘ok. fine, I’ll deal with it’. So, you go, there, you attack this guy.” (P5);

### (b) Self-made objectives

In playing out their self-made objectives, players create their own goals as a stepping-stone to fulfil their bigger goals in the game. These self-made objectives are set to help the players in both short-term and long-term period of the game. For example, players aim to win more matches and league trophies to qualify for the national team manager (P6).

“So if I for example go into,mission, and then I would need a lot of weapons like hammer then I will set, myself a goal or going to the place and then pick up some things” (P1);

“So you both have to get both of, these buildings. (...) Yeah. So you have to capture it, then defend it” (P2);

“Yeah. There isn’t. You have to...if you have to look at the game, to know what’s going on, in order to see if everybody go to the same bit, then you definitely going to lose because there are several bit steps you, have to do. (...) So you have to look where people were going again and decide, what to do” (P3);

“Not that we didn’t have a goals, we have a kind of a goal on our own. So we’ll be like, we visit a town or, something. We’ll be like, oh this is a really nice house that you can buy this towel or this is a really nice piece of armour that we want. So, let’s go and buy all this stuff or pick all these barrels and turn them into, potions then turn the potions into money and might sell to someone. And then, with that money, let’s buy the things we want. So, it’s those sort of goals. But there are goals that we made out for ourselves. Goals not missions” (P4);

“Yes if you take the team from the 3rd division. You want that your goal after 5 years to go to the Premier League. (..) Now I’m trying to get a job in the national team.” (P6);

“You’ve got to be a bit careful that you don’t flick too hard or knock something too far” (P7);

“You just say, like make a noise or say Hi and they will see you, and when they try to shoot you, you run to the next screen. And they will follow you. That’s how you lead them to the trap” (P8);

“So, at first at the beginning, it was like ‘I don’t want to be caught by the police’ and I want to avoid the obstacles. That’s it. So if I don’t have the coins, it’s okay. But you know, when you play better, so you are aiming for the coins now. You know you’re good in avoiding this. So, avoiding the obstacles, so you know you won’t be caught by the police” (P9).

### 3.4.3 Gameplay

Having chosen the character and determined which sort of goals they would follow, players would then proceed with the gameplay, which consists of personal development, state of emotions that they experience during gameplay and the strategies that they choose to undertake. These three categories of the gameplay aspects are further divided into their own corresponding subcategories as shown in Table 3.4, which will be described in the following sections.

Category		Subcategories	
1	Personal Development	a	Development of skills
		b	Development of character
		c	Development of story
		d	Rewards
2	States of Emotion	a	Attachment to the character
		b	Enjoy playing the game
3	Strategy of Play	a	Winning in the game
		b	Self-preservation of character
		c	Styles of play
		d	Competitiveness

Table 3.4: Aspects of Gameplay

#### Personal Development

##### (a) Development of skills

When players start to play the game, they are given the opportunity to develop both players and game character’s skills over time such as to “be more proficient with small

guns” and being better at each round of game. The skills that they develop would serve them well throughout their gameplay. Although their initial skill set depends on which state their character was at the beginning of the game, players have a hand in honing these skills, as they know that they will need it later in the game for personal use or mission. For example, a gamer “tend to be very careful” (P9) when they first play the game and then progress on playing by intuition, having played the game many times. Skills that the characters themselves have that can be developed are done by repeatedly using that particular skill. Such is the case for Participant 4 “whenever you make a potion”, the “skills at making a potion gets a bit better”. As players recounted in their experiences below:

“Whenever you make a potion, your skills at making a potion gets a bit better, so that potion you make can be slightly better than that. Then after you make that one, you still gets a little better. Or if you use a sword then your skill using sword skill get up a little bit” (P4);

“We definitely go into a bit of a, pattern where there might be more lines at the top or the bottom that you can’t go off. Rather than going too far over, it tends to be best to try to stick near the line and sticks towards the edges. Coz if you hit an edge, and it takes some of the momentum off, and so, when they try to bounce you out, then hit the edge, there’s less slightly that you get bounce out” (P7);

“I might change it a little bit, trying to experiment it in my 3rd or 4th gameplay. In my 1st, it’s like, my first gameplay it’s like I’m trying to complete the game. Second, I like to improve how I solve the puzzle, and maybe the 3rd and 4th is the same. After I have already mastered the puzzle, I tried to experiment it. Maybe I go to bad ending which is I try to not save the Mudokon or try to kill them. Yeah, mostly try to experiment them in 4th, 5th gameplay” (P8);

“I’m a bit clumsy. So, at the beginning, I was being caught because I’m not..it’s very fast game. You have to coordinate with your hand and you don’t know what are the obstacles in front of you yet. But as I practice, so called practice, it’s getting better. I think the highest level, I don’t know how many level they have. More than, 10 level. More than 8 or 10 level I passed” (P9).

### (b) Development of character

As a result of their skills being developed as they continue to play, their characters have also grown from being an ordinary person to being a powerful person, having made their characters “better being in the world more capable of doing stuff” (P3).

Players' characters get to upgrade from a lower to a higher rank, depending on how well they fare in the game. For example, characters are upgraded to a different, but better character to play as, or the character associated to the skill set developed becomes a superior person as well "to do other stuff in the world better" (P4). As the players said:

"So, made your character better being in the world more capable of doing stuff I guess. (...) You always wanted you character to be this...you always want your character to be powerful but maybe not physically powerful maybe just good at stuff" (P4);

"Depends on, if you win the league, you get the money. You win the cup, you get money. If you go to the Champions League and depends on each stage or each match, you get money. So you have some money, income. And it depends on which position you finish in the league. Because if you finish first, you can get also some television income" (P6);

"Yeah. And sometimes even you have the pre-requisites, depends how strong you are. Then sometimes missions can be very long because they're very hard and slowly because you're so weak. And sometimes when you're strong, you can really quick depends on how strong you are" (P5);

"There's one like if you reach a certain point, you can use...this one the ninja. You're a ninja surfer. So, that you have to reach another certain point. And it tells you that this ninja has this ability to jump more. Of course I wanted that ninja. (..) If you don't stop the game, you can actually just continue with the character. But if you stop the game, if you have enough coins, you can choose another character" (P9).

#### (c) Development of story

Together with the skills and character, players develop their own stories, unique to their gaming experience as they choose to play the game in their own personal way. These player-owned stories, coupled with the game narrative, form a unique gaming experience. It shows how much players have 'grown', now with a rich history of the journey from day one in the game. For example, they get to go on quests, carry out missions or objectives, which "can lead to other objectives" (P3) and also do other activities that may be unrelated to the main game storyline itself. Below are excerpts from the players' interview:

"I think it (Fallout) has both (referring to narrative and story) and it has the same beginning of the story but then it develops differently depending on what you are doing in the game and how you develop your skills and what karma you choose and stuff like that" (P1);

“Then, after that you sort of just get thrust out into this fantasy world. And you could sort of vaguely give a direction about what they want you to play. They sort of say like this interesting thing going on over here if you go over here, you’d probably have a good time. Really gets to determine whatever you do. And you get to do it the way you want to do it. It’s so...the game’s not really about anything. It’s about being a person in a fantasy world. And it’s about experiencing that life in the way that you want to. But, my most fond memories of it are to do with anything except sort of normal life. I remember I used to..you can go to merchants in the city, and buy various commodities. Then you could go somewhere else and sell them on high. You could sort of make a profit of them. Or you could turn them in to something use as skill that your character. Say you can maybe buy a few ingredients for a potion and then using that skill your character by turning to a nice potion. Then sell off somewhere else. Or you could just go to exploring the wilderness and sort of have fun just looking at the world to look it sort of vista, eye candy that gets, coz it’s really pretty.” (P4);

“The storyline is based on whether you save your people or not. But the story is still the same. He went on a quest. He complete the test, get his powers and try to shut down the factory. And that’s all. Based on his story to us and our gameplay, and the end will show either good or bad result from our what we did in the gameplay, whether we save it or not” (P8).

### (d) Rewards

As the fourth element in players’ personal development, being rewarded plays a big part in determining how much players fare in the game. Just as in real-life, big things come in small packages, with rewards coming in the form of bonus times, unlocking characters (P9), getting better weapons for harder objectives (P3), and in-game award medals (P1). It also serves as an incentive to perform better in subsequent missions, with players knowing there will be more rewards should they perform as good or better than before. There is also that sense of being rewarded after a hard day’s work after saving those in need from being killed off in the game, where the people save you in return when you yourself are in grave danger (P8). Following are excerpts from what players have said of their experiences:

“in PlayStation where you can see achievements you can unlock achievements depending on what you’re doing and some of them unlock your bron, bronze award, some of them silver, some of them gold and the platinum one where you complete all sets of awards” (P1);

“But you can also upgraded to... well the PvP aspect also have its own rewards. If you win battlegrounds, you get points. You spend those points to get weapons which are good for PvP. Weapons and gear. Which are good for PvP. Maybe in PvE you get, you just loot from the NPCs, which are good for PvE” (P3);

“So, from the gameplay, I saved all the Mudokons and the ending that I was repaid by the people saving me back. I feel like the hardship that I have been through to save this people, like in the real world the hardship that I have been through to do some test, I’ve been reward” (P8);

“You can even fly if you have the rocket with you. You achieved certain points and then they just give you a rocket behind you and then you can fly. You can get the... for a while you get the coins...it’s like a bonus time. (...) So they will give like rocket or shoes that can jump over in a big leap. You achieve one level and you’re being rewarded, although it’s in a short period of time” (P9).

#### **States of Emotions**

##### (a) attachment to the character

Players also experience the different states of emotion throughout their gameplay. They can get attached to both the character that they play and the non-playable character (NPC) with whom they interact during the game. Who they choose to interact within the game can affect what they will experience in the subsequent parts of their gameplay. As they play the game and interact with other characters, players can get attached to these NPCs. They care about the characters to some extent because the “connections” (P4) that they make in the game feel real to the players, even though they know that these characters are just fictional. These attachments helped players to make meaningful choices that would affect both players’ character and NPCs in the game. Below were statements made by players on their attachment to the character:

“It’s his skeleton, it’s Sinderion’s skeleton. It’s Sinderion’s journal. He told me that a week ago, I haven’t able to stop thinking about it since. I feel so sad. And I can’t bring myself to tell my girlfriend about it. Coz I know she’d be sad too. So, the connections that I made in the game, feel really real. Not just my character, but some people who I think my character was friends with” (P4);

“Because you get attached to what your character is doing. and you get attached to the character as well” (P3);

“It’s really hard, you don’t want these characters, you don’t want to lose these characters

then later. At some point. (...) That you kind of care about, you know to some extent” (P5);

“But, the thing is, if I slap my kind, my own species, until certain level, he will die. That show how weak our species is. The Mudokon species is. That’s kind of pathetic they are. That’s why I attached to him. I want him to be safe. I want his kind to be safe.” (P8);

“But when you play a game, you want to be in the character. Like if you’re running, you should be a guy who is running” (P9).

### (b) Enjoy playing the game

Playing the game also gives the players enjoyment, whether it is playing against another gamer (PvP) “because it’s all humans” (P2), co-playing with another gamer where they can share the experience together (P4 and P7) or playing against the game environment itself (PvE) “because it’s just like a puzzle” (P3). Players’ enjoyment also comes from the challenges faced in the game, especially when they have overcome it, emerging as a victor (P7). As how the players have said it:

“Well, yeah. I used to play it (Red Alert) a while. Just got bored in it. I think that’s why online FPS is a...you can play them for a hundreds and hundreds of hours because every time you go on a level, it’s different because it’s all humans. Not bots. So, you’re not fighting bots or AI” (P2);

“First, I enjoy a little more of the environment. It’s just me because it’s just like a puzzle. You know? (...) Yes. The environment one is more of a puzzle and I like that because you know. (...) I’m with the horde. Because I enjoy both factions.” (P3);

“It’s really exciting to play a game with someone else actually because when something really shocking happen, you can share the shock for when something really exciting happens. Especially with games with stories.” (P4);

“That’s why they’re really nice. And there’s really no other game that made like this. At least not that I know. It’s really good” (P5);

“The other team tackle my player. He gave him a red card because he was very angry. And then one player from the same team went to the referee and he was moving his hands. I didn’t know what he was saying. And he gave him also the card. The first time that happened, I was laughing” (P6);

“I quite enjoy it. It’s very frustrating game but it’s...I quite enjoy that the challenge of it. (...) No, I think Draw Race, it’s been played less because it’s less competitive. So, Olo got played a lot more because it was a lot closer. I think I enjoyed that more” (P7);

“That’s the only game that I remember I enjoy from other games (...) It’s fun because I like the story” (P8);

“It’s just...it’s like addiction, when you can get run away from someone and then you can get coins at the same time. It’s like... two things at one time. So yea, I like it. (...) Of course I feel happy. I’ll play again. It’s like you’re running, and you win the game” (P9).

### **Strategy of play**

In addition to the above mentioned aspects of gameplay, players also plan their strategies in playing the game. These strategies include the measures they take to win in the game, self-preservation of their character or staying alive to continue to play, the different styles of play used throughout the game and also competitiveness.

#### (a) Winning in the game

To ensure that they win the items needed for their missions, matches or battles, players have their own strategy that may be different from their counterparts. They tend to take the simpler approach in winning puzzles, aiding other weaker players to win as a team and plan out their gameplay to go for the ultimate win in the end. Winning in the game is important, otherwise as one participant puts it “you don’t win trophies, what are you doing here?” (P6). As the players put it:

“Depends. Sometimes, if they’re really good players, it doesn’t matter what they do. But it’s kinda crap players, it’s better if you stay near..so you can babysit them. (...) Yeah. It’s a very difficult. I mean you rely very heavily on your team. So if you have a crap team, there’s nothing you can do. You just die and lose. It’s better to have two balance teams” (P2);

“No. You want them from different classes. (...) Because if an item drops and it is good for you as the class, then other people wanted as well. So you get the least of chance to get it.” (P3);

“I sell other players and I have money and I buy young players. So I invest for the future. So the first 1-2 years, I will not win anything” (P6);

“Actually, I choose the simple one whichever help me solve the puzzle more easily. Because when ... for example in one case, there’s a lot of enemy, so there’s a one of the guard nearer to me so I possess him. And then when I possess him, I can use his gun. When I possess him, I can control him like Abe and he also have his own talking speech. So I can but at the time I don’t use his speech, I just use his

gun. So I went to another room which is full of his kind, the enemy kind. The security guards. They did not know that I'm possessing him. So I just kill those guards. After I kill all of them, then I just went out from the possession, which is kill the guard that I possess and then I just went through the room without any danger" (P8);

### (b) Self-preservation of character

In preserving the life and health of the character, players use the skills and abilities in their arsenal, coupled with their own determination to not let their character be killed off to remain in the game. They can opt to stay near the team leader as the chances to stay alive (or play longer) are higher and therefore avoid being shot (P2). Even when the character does not have sufficient skills to attack the enemy, players use their creativity to be in defensive mode or run away from battle until their energy or health has been replenished enough to overcome the enemy. With the knowledge that their time is coming to a premature end, players step it up to remain in the game. This is shown in an example where they worked much harder by winning more matches to earn enough points to remain in the football club (P6). In the players' own words:

"I genuinely stay near squad leaders coz they have better guns than I have. And they got smoke. So if the commander throw a smoke, then you can advance without being shot." (P2);

"Yes. You have time to react. You have time to, either move to a better position, or if trying to evade someone, their attacks or try to get them to go into defensive mode. Well, defensive where you attack the enemy, attacks the best defence. If you know what I mean. (...) the rogue can't heal. So, you have very little to do. Well, you can vanish. But if you have a lot of effects on you, you might be able to heal because games doing damage to you. (...) You can't heal yourself. So, but you may be able to run away and...there's the advantage right there." (P3);

"The president of the team can kick you out if you don't win. I was playing for Arsenal, I don't know, the players weren't playing. I have very good players, but I didn't won. I don't know. I was losing from the team because the tactic was not good, the players between them, they are not familiar. Because it's good to have players that have played a lot of time together. They couldn't play together. And I got a message from the board, in the next five match, I have to bring 9 points to the club. And if I don't bring 9 points, I'm gonna resign from the club. I have to find another job. (...) No, I didn't kick out. I got the 9 points and I stay" (P6);

"It's just, bird's in the middle of the screen. If you don't tap it, it will fall to the bottom

of the screen and die. If you do tap it, it goes up a bit.” (P7);

“If you don’t want the enemy hear your noise, you have to sneak. (...) Mostly if you on the same platform, if you say something, they see you, they just kill you. So, it’s better to..you are actually on another the platform, so they cannot reach you, so you interact with them” (P8);

“because it needs focus, the game is fast, it needs focus. You can’t play and say ‘oh, what are you doing?’ You can’t say that. You can’t look at right. You have to focus on it. Because it’s a fast game” (P9).

### (c) Style of play

Another strategy used in the gameplay is the players’ own style of play where in one example, a participant chose to play in a third-person shooter (TPS) perspective, rather than in first person shooter (FPS) perspective as the participant felt “quite comfortable with third-person” (P5). Another notable style of play was where the participant spent a lot of game time to explore the game world, “hang around, pick ingredients, sell the ingredients for profit” (P4) instead of playing the main combat part of the game. These different styles of play exhibit by the players speak much about themselves, making up a part of their identity in the game. As how the players stated below:

“You can select for, some probably attackers. And you may have problem because they cannot play defence. What I’m trying to do, is I’m trying to have 2 players for each position. (...) I try to do a tactic but different because most of the time...or to have players that can play different position the same way” (P6);

“So, makes it half narrative maybe one to switch the controller, control the character for half an hour. Then we’ll switch back. You know, we go back and forth. It’s a nice thing to do. (...) But mostly what we did that actually I remember is things completely unconnected to combat. So we invested all of our skill points in these sort of skills that have nothing to do with the main combat part of the game (..) But the skills that we picked are completely useless for that. We pick like the ability to make potions and the ability to barter really well. We picked all these non-combat skills so our character just sort of hung around the cities for the first 30 or 40 hours. That’s what we did. All we did was hang around, pick ingredients, sell the ingredients for profit” (P4);

“I just play as the first part. (...) Yeah. No restriction. I just go along with the story (referring to whether he changes the way he play throughout the game series). (...) I’m quite comfortable with third-person. But you can switch into first person if you want” (P5);

“I prefer to the start, playing games. NPCs. (...) So you can be doing several objectives at the same time” (P3);

“I roughly got tactics. Trying to aim in the middle of the pipe, so trying to drop him so it hits the middle of the pipe and then jumps out. (...) So, yeah, then you’ll need to go very fast. But, I think I’m quite rhythmic with it. I keep trying to keep it quite steady. (...) I try to keep it about halfway in the screen and just keep it steady and then go down slowly from there” (P7);

“Yes, I have tried sometimes. Do some funny stuff like when I able to go near him, the one of the security guard, he was sleeping. When I woke him up, I slapped him. Another thing, Abe, he can slap. (...) I try to..this is just an experiment, I slap the enemy, to kill him. But, he cannot die even though I slap him 100 time I try long but he cannot die. So after I slap the last moment, I just ran from the screen” (P8);

“You lose something when you don’t pick up the coins because sometimes when first I begin to play the game, I tend not to collect the coins because I was afraid of the police guy chasing me. And I was focusing on how to avoid the obstacles” (P9).

### (d) Competitiveness

As the fourth part of the gameplay, players are competitive by nature. They compete not only in a multiplayer game but also in a single-player game where they want to beat their own best time and rank. It also happens if the character they have already selected has characteristics that are expected to win, motivating players to fight for the top spot in rank. In a multiplayer game, players compete with each other to win the coveted ‘Winner’ title in a game. If they fail in their attempts, they will try to improve their strategies and win again. Being competitive leads players to plan better strategy in their gameplay so that they can achieve their goals and win. Below are the views shared by the players:

“For example if you have a network of friends on Playstation, then you can compare how many medals you got, with your friends. (...) So like, I don’t know these people but I’m better than them. Completing this game.” (P1);

“No, you choose it (referring to choosing class in the game). It’s first come, first serve. So, when you first get on the server, everyone choose their own better classes. And everyone’s left with the rifleman” (P2);

“But if you get a Arsenal, Chelsea, Manchester, you have to win trophies. (...)Because you’re very competitive. You’re among the best team in the game.” (P6);

“Yes. So gonna be beneficial for someone but if it is beneficial to you, you want less

chance of other people getting it. So they can actually gain something out of it” (P3);  
 “If we play Olo, which is the one where you flick counters across the thing. And we take turns who go first coz we’re a lot closer in skill on that so it’s a lot more competitive. (...) And we’ve definitely both quite aggressively try to knock each other out. You kinda have to. If you just focus on getting all yours across that side, it will be a draw” (P7);  
 “I would admit that the kids are better than me. (...) It’s like as long you don’t hit anything, it’s okay at first. When you play many times, you want like ‘I want to score more scores’. You feel like you’re good in...it’s like phase by phase for me” (P9).

### 3.4.4 Completion

At the final leg of the gaming experience, completing the gameplay has different meaning to the players. Players reach a state of completion where they either have their own sense of completion or a preference for completing the game (see Table 3.5).

Category		Subcategories	
1	Completing the game	1	Sense of completion
		2	Preference of completion

Table 3.5: Aspects of Completion

#### (a) Sense of completion

Players get a sense of completion in the game when they feel they have a control in stopping and leaving the game at their own conclusion for the game. Their sense of completion comes from “because we completed the main storyline”, getting the “feeling that the game’s being completed” and also where they have overcome challenges and completed the main mission of the game. As the players recounted their experiences below:

“Mass Effect is a single RPG. So it’s not a multi-player. I like these games because they have closure. (...) I don’t like to replay. No. Because it’s really turn out really well. The all the 3 parts. So I really like that.” (P5);

“Just because we completed the main storyline. (...) But after you finished the main storyline quest, it doesn’t say the game’s being completed. But you get the feeling that the game’s being completed” (P4);

“You can’t beat the game if that’s what you asked. You can’t say ‘congratulations, you complete it’. There’s isn’t one” (P3);

“Well, you can either win by capturing or you can win by killing all the other players. Many, many times, then you win.” (P2).

(b) Preference of completion

On the other side of the coin, players also have their own preference as to how to complete the game their way even though there are various ways to accomplish this. Ultimately, players “chose one of the ways to complete it and completed it that way”, having the liberty to do so at will. Choosing how to end their gameplay with the corresponding conclusion, players derive self-satisfaction knowing that they have a hand in completing the game their way. Should the game not turn out the way that they wanted, they would then replay the game for the ending that they wanted and be satisfied with.

“They have so many different ways to complete the game. (...) Yeah, there is obviously many ways to complete the game. I completed ones with one outcome. (...) There is several ways to complete the game. I chose one of the ways to complete it and completed it that way.” (P1);

“I don’t like to replay. No. because it’s really turn out really well. The all the 3 parts. So I really like that.” (P5);

“You can either save or not. Then the consequences is if you did not save, you get the bad ending, and that how horrible the bad ending is. (...) Usually I get the bad ending, I play it once to get the bad ending. (...) Purposely I did not save it. But mostly I get the good ending because I get the satisfaction from saving those Mudokon, just self-satisfaction. There’s a... the reward is the good movie. The good ending cutscene” (P8).

## 3.5 Discussion

### 3.5.1 Meaningful Choices in Games

This identity formation study was initiated to help answer the main research question of the thesis, which was whether players form a projective identity when they play digital games. Thus, the study was carried out to investigate players' experiences playing their favourite game, specifically looking into the process that Gee described as players formed their projective identity. Meaningful choices, the overarching theme in the grounded theory emerged as a mechanism by which players formed their projective identity in the game. Players projected their identity through the choice of character and goals, making meaningful choices from when they start to play, right through to when they reach the concluding part of the game. This formation of players' identity supports Gee (2003a) claim that players formed an identity, in particular, the projective identity whenever they played games.

Gee's concept of projective identity (Gee, 2005b), can also be seen in several concepts such as *projecting own personal values unto the character*, *personal development* and *strategy of play*. His projective identity was that of the game character having the players' values and desires imbued in it. Additionally, Gee's personal trajectory, which concerns the game storyline co-authored by both players and character, is similar to how players choose to develop their own story in this study. As for the similarities to the strategy of play, Gee further explained on the projective identity through the authentic professional expertise where both players and characters alike enact out the strategies and actions in the game. Although Gee has scrutinised the projective identity in depth, there was little mention on players' choices in forming their identity. The projective identity did include discussion on players' strategies and actions but lacked players' meaningful choices in playing the game. Players' abilities to choose how they want their experience to be meaningful is what is missing from Gee's theory. Meaningful choices bring together all the aspects of the game that players are concerned with to make their playing experience their own.

Although many types of research focused on the identity relationship between players and the character that they play, identity in digital games need not be confined mostly to just the game character. Instead, the identity of players in digital games can be spread across the character, goals, gameplay up to the way they complete the game. Gee was right in his notion of projective identity, where players did project their values and goals onto the characters, as well as develop their skills and story in the game. However, he only spoke from his experience and not of other players; thus he did not have the whole

story on the essence of players' identity, which is their meaningful choices in games.

Players made their meaningful choices in the games as a way to express themselves, namely through the character, goals, gameplay and completion of the game. Throughout the game where feasible, players would make choices on which character they wanted to play as, move where they wanted to go, do what they wanted and needed to do, and how to go about this (Dickey, 2005). Every choice that was made during the game, players have made the experience personal to them and that in turn influenced how they played the game. Every action and decision made in the game would then determine the way a game looked, from the beginning to the end of the gameplay (Klimmt & Hartmann, 2006). In another grounded theory study, players were found to have formed their personal gaming experience through the notion of puppetry where they could manipulate the actions of the character using the controls provided in the game (Calvillo Gámez et al., 2008). However, just having control of the character, and by extension the game itself, is insufficient for players to entirely make the playing experience their own without projecting their personal values into it.

There has been no single definition of identity in games as the definition of identity is contingent on the context it was studied in. Current studies on identity formation in digital games have focused more on identifying with characters (e.g. (Lee & Hoadley, 2006; Bessière et al., 2007; Van Looy et al., 2012) than other aspects of the game. However, there is more to having an identity in the game than just being able to identify with the character that one plays as. As players interact with more than just the character, other aspects have to be taken into account regarding the playing experience. The four key aspects found in this study encompasses the players' experiences with their favourite game, brought forth by the meaningful choices made by them. The resulting theory from this study covers multiple genres of digital games, instead of focusing just on a single genre like most studies have done.

### **3.5.2 Comparison with Existing Literature**

There are also elements of the grounded theory, which have similarities with those mentioned in existing literature. The aspect of making the character look like the players resembles similarity identification coined by Feilitzen and Linné (1975). The authors found that players would personalise the game character to resemble themselves when given a chance. Similarity identification focuses on a person's identification with the character based on the characteristics that they shared. In this study, identifying with the character based on the appearance is important in supporting players to form their identity in the game. This way, players can recognise themselves in a self-representation

through the character that they play as in the game (De Mul, 2014).

Turkay and Kinzer (2014a) have also made similar findings where players did project some aspects of themselves onto their characters. These aspects included the skills that they possessed or physical appearances that they wanted their characters to have so that the characters in some way became them. The authors suggested that players who customised their characters wanted to relate to their characters. Players were thought to take ownership of the character when they could customise it, which then led to a higher identification with the character. When customising the character, players can see their choices reflected onto the character, which in turn facilitated their identification with the character.

The grounded theory's personal development, in particular development of skills and rewards, shares some similar traits with Doh and Whang (2014)'s study on players' achievement within the game. In that study, players in the achievement-oriented group focused on their achievement in the game, having considered the game for their personal growth. As players progressed through the game, they received different forms of rewards, some of which could help in achieving their tasks or as awards in recognition of their skills and abilities (Doh & Whang, 2014) or even as something that they enjoyed doing in the game (Calvillo-Gómez & Cairns, 2008). Players who played the game to reap the rewards or to boost their in-game skills made those choices so that they would have a meaningful playing experience for themselves.

Players play games because they want to be entertained and have fun while playing (Olson, 2010; Lee & Hoadley, 2006; Hayes, 2007). When it comes to enjoying playing the game, it is one factor that is needed for players to identify with the character as suggested by Hefner et al. (2007). In their study, players who played the game identify more with the characters they played as compared to those who just watched the gameplay as passive players. This identification lends support to the grounded theory that players themselves have a hand in taking charge of their gameplay, which would then be more enjoyable to experience for them. Understandably, some of the aspects of the meaningful choices theory referred to what we understand from the players' experiences. In particular, players attain to have fun while playing games. It is well understood that players seek to overcome challenges in the game so that they could enjoy playing the game also (Denisova, Cairns, Guckelsberger & Zendle, 2020).

Furthermore, there are some aspects from this study that corresponds to Freud's theory of personalities: the id, ego and superego. Although Freud's work was on personality development from infancy, the grounded theory began from the beginning of the gameplay until its completion. Both rewards and competitiveness concepts from

the study shares the resemblances with the id, which in turn is based on individuals' immediate pleasure that satisfies their needs. The grounded theory's aspect of projecting one's own personal values is similar to the superego, which is based on individuals' moral values and consciousness having an influence on their actions (Freud, 1923/1962).

When making meaningful choices, players wanted to create a meaningful play for themselves (Salen & Zimmerman, 2005). They were presented with choices of characters, goals, gameplay and completion, and decided for themselves to choose a meaningful alternative to follow through. Knowing that the choices made had consequences in the games, players would only explore and choose ones that were meaningful (Marcia, 1966; Meeus et al., 2005). Once the choices were made, they then committed themselves to the choice that would lead them into creating a playing experience of their making. In psychology, Marcia (1966) described this commitment of choice as individuals who have reached the identity achievement status after having chosen their alternatives to suit their own plans and not of others.

### 3.5.3 Limitation of Study

As the study employed grounded theory method, I have deliberately not let gender and nationalities affect the theoretical sampling as I was recruiting participants. When developing grounded theory, Bryant and Charmaz (2007) recommended that the sample size be determined by saturation of data instead of being a representative for the demographic. Rather than testing the meaningful choices theory for other player demographics, the meaningful choices theory in this study was developed inductively from the data, with the theory being continuously refined through its concepts and categories as stated by the grounded theorists, Bryant and Charmaz (2007) and Corbin and Strauss (2008). The resulting theory, which is the meaningful choices theory that had reached saturation, may not be representative for the entire demographics of players but had given a robust result from the theoretical sample.

Although the grounded theory is limited in its theoretical sampling where the method has no claim for being representative, grounded theory is relevant in its part for being descriptive of the phenomenon. The meaningful choices theory provides a variation in players' formation of their identity, in addition to existing literature. Moreover, through grounded theory, the meaningful choices theory fits with Gee's concept of projective identity where players do project their values and desires onto the character so that the character can become what players have wished it to be throughout their gameplay. Gee's concept of projective identity was not sufficient in the sense that he did not take into account of other players' experiences apart from his own, which consequently have

missed out on the remaining aspects of meaningful choices theory. This study, therefore, provides a more sound empirical basis to show that Gee's theory resonates with the experiences of at least some other players.

Even though there was a diversity of players, a good mix of genres and nationalities, there was not a diverse mix of age or profession of the players. The current study did not seek to explore the differences between how each of the genders forms their projective identity as it was not the aim of the study. The study goes beyond focusing on an aspect of identity, gender, genre or even nationality, and instead studied players' shared experiences in various genres. The study did not attempt to be representative in that all digital game players make meaningful choices in their favourite game. However, the meaningful choices theory has given us an insight and understanding about whether players form their projective identity and that they do form their projective identity by making meaningful choices in the game (Corbin & Strauss, 2008). The concept of meaningful choices should apply for many players, though the specifics of how they make their choices might differ from each other. Of course, this is not to say that these individual and social differences do not matter for a full understanding of projective identity. It would be useful to explore such differences to see how games are consumed differently by different types of players in different personal and social contexts.

#### **3.5.4 Summary**

With existing literature and the study sharing similar traits regarding identity formation, the grounded theory on players' formation of identity is a novel one given that no study has been found on investigating Gee's concept of projective identity in multiple game genres. Most studies on identity formation related to games are more concerned with identification with game characters and single genres such as first-person shooter and role-playing games. However, this study found that meaningful choices occurred throughout the players' playing experience, not just with the character. Players make their meaningful choices to express themselves in the game and making their playing experience their own. The contribution of this study is that Gee's notion of projective identity is also seen as an account of other players' experiences. Moreover, this study suggests that the projective identity is formed when players make meaningful choices in the game at all stages of the gameplay. Even as the study was on a small scale where players have been interviewed on their favourite games, which covered across multiple genres as mentioned earlier in the paper, the theory on player's identity in games has reached saturation and therefore is grounded.



## Chapter 4

# In-Game Choices Study

In literature, there is a lot of research on why players play games such as MMORPG and FPS (see Yee (2006), Olson (2010), Fuster, Chamarro, Carbonell and Vallerand (2014), Jansz and Tanis (2007)), which were tied in to their styles of play and personalities. In their book chapter “Game Design and Meaningful Play” in which they focused on a meaningful play in games, Salen and Zimmerman (2005) outlined five stages of choice ranging from before the players were presented with a choice, to how the outcome of choices was presented to players. What these studies lack, however, was how players make meaningful choices that ultimately shape their experience within the game.

In the first study using grounded theory, players were found to make meaningful choices in their favourite games. Meaningful choices were found to be the mechanism where players formed their projective identity through their choices of characters and goals. Moreover, their meaningful choices comprised both gameplay and the way that they completed the game. The previous study has helped in part to answer the overall research question of the thesis on whether players form a projective identity when they play digital games. However, the identity formation study only reported how players’ meaningful choices were manifested when they played as they recounted their playing experiences. Little is known about how players make their meaningful choices when they play the game itself, and not as a recounted experience.

It was not clear how players’ enact their meaningful choices during active gameplay and consequently able to form their projective identity in the game. To understand what it means for players to make meaningful choices in the game, the goal of this study is to really understand players’ experiences from a different context and perspectives, rather than just relying on their recounted experience.

Hence, this empirically driven study aims to address three questions:

- (a) what actions do players choose to make when they are engaged in a game?
- (b) which of the actions made by players in the game are meaningful to them?
- (c) why are the actions meaningful to the players when they play their game?

These questions helped to answer the main research question of the thesis and provide empirical support for Gee's claim that players do form their projective identity when they play. Furthermore, the in-game choices study would have the empirical support for players' meaningful choices not just from their account but their choices which will lead to their actions in forming their projective identity in the game.

### 4.1 Methodology

In this study, I have used post-game player commentary method for the data collection to discover more information on players' meaningful choices during their gameplay. In the previous study which was the identity formation study, I have used grounded theory for both its data collection and data analysis because the study sought to investigate an exploratory and hypothetical phenomenon. In contrast, this in-game choices study already has a known goal, in that players do make meaningful choices when they play, except it is yet known how they actually make those meaningful choices during active gameplay. Hence, grounded theory is not needed in this study. Instead, I used thematic analysis to answer the more focussed questions on players' experiences. Additionally, I wanted to identify patterns in their playing experiences and thought processes when they play (Adams et al., 2008).

#### 4.1.1 Post-game Player Commentaries

In this study, I used a data-gathering method called post-game player commentaries to gather information on why players made meaningful choices in their gameplay. Post-game player commentaries (Gow et al., 2010) were a form of think-aloud protocol where players talked about their actions after playing a game. More specifically, they were a form of the cued-retrospective think-aloud protocol where players talked about their actions and gameplay after having played the game with their recorded gameplay as cueing material. With this protocol, players need not be distracted by having to explain their actions while playing. In a study comparing concurrent and retrospective verbal protocols, Savva et al. (2015) revealed that using retrospective verbal protocol was more effective than

concurrent verbal protocol when participants evaluate their experience using websites. Although the authors found that the retrospective verbal protocol required more time and effort from the participants, the retrospective verbal protocol was thought to be more advantageous for the researchers in their study (Savva et al., 2015). In regards to player experience, should the study have employed the conventional think-aloud approach, players would find it challenging to play and talk about their gameplay at the same time (Barr et al., 2007).

Gow et al. (2010) outlined six (6) principles to ensure that players' commentaries reflected closely on their gameplay and experiences:

- (a) players should not be pressured into performing when playing the game
- (b) players should be informed that their performance did not matter in the study
- (c) players could stop playing the game and would not be forced to continue playing longer than they usually did
- (d) players could play for as long as they liked or until they met other termination conditions
- (e) gameplay session should not take too long or be repetitive, otherwise players might mix up similar gameplay episodes or give an incorrect account of their experiences
- (f) commentary session was to take place as soon as players stopped playing the game, so that they were able to more precisely recall what they thought when they played

With these principles in mind, players were also given control of the video playback when giving the post-game commentaries. Having the controls in viewing their recorded gameplay allowed players the freedom to pause, play and rewind the video playback at their leisure. Additionally, I myself as the researcher have occasionally paused the playback to prompt players to express their thoughts at particular points in the gameplay.

#### **4.1.2 Participants**

Through this study, I have recruited a total of 10 participants via opportunity sampling (see Table 4.1). The study was aimed to gain insights and understanding of how players made their meaningful choices when they played their game of choice. As such, the goal was not to be representative of a large sample of players but rather to gather a rich dataset from the retrospective verbal protocol that could inform readers about how players' meaningful choices are unfolded when they play their games. Participants were

<b>Id</b>	<b>Age</b>	<b>Gender</b>	<b>Country</b>	<b>Chosen Game</b>	<b>Genre</b>	<b>Years of Gaming</b>
P1	27	Male	Cyprus	The Elder Scrolls: Skyrim	action, adventure, RPG	>20 years
P2	39	Male	Chile	Plants vs. Zombies 2: It's About Time	action, strategy	33 years
P3	36	Male	UK	Left 4 Dead 2	FPS	32 years
P4	37	Female	UK	Game of War: Fire Age	action, strategy, MMOG	30 years
P5	34	Male	UK	Middle Earth: Shadow of Mordor	action, RPG	23 years
P6	43	Male	UK	Civilization Revolution	turn-based, strategy	31 years
P7	26	Male	Portugal	Angry Birds Go!	racing	22 years
P8	43	Female	UK	Assassin's Creed II	action, adventure	20 years
P9	33	Male	UK	Castle of Illusion starring Mickey Mouse	platform	25 years
P10	25	Male	UK	Final Fantasy 7	RPG	>15 years

Table 4.1: Demographics of Participants

asked to bring their chosen games to the Home Lab in the Department of Computer Science building, where I conducted the study. The games consisted of different genres, as each participant chose their own game to play. Among the participants, P3, P4 and P9 were staff while the rest of the participants were postgraduate students of the University of York. None of these participants has taken part in the previous study.

### 4.1.3 Brief description on the chosen games

Here, I will briefly describe the ten games that were played in the study. The descriptions of the games below are from external perspectives about the game from game developers, ratings and reviews websites, and as such are not from the participants' gameplay during the study. These descriptions are written so that readers will have an idea of how the games are played and viewed by other players. On top of that, with these descriptions of the games, it is hoped that readers will be able to relate the participants' gameplay with the analysis in Section 4.3.

### **Skyrim**

Bethesda Game Studios released an action, adventure role-playing game called The Elder Scrolls V: Skyrim in 2011. The game was set in the fictional land of Skyrim where the character can fight dragons (Bethesda Game Studios, 2011a). In the game, players can choose any character, weapons, spells and abilities to play any way they wanted, whether it was to follow the quests given or roam around the open world and make their own quests (Bethesda Game Studios, 2011b). The game begins with the players' character imprisoned and being led to their execution for entering the land of Skyrim ('Skyrim, The Elder Scrolls V', 2011). However, just before the character gets executed, the main antagonist, a dragon by the name of Alduin attacks and the players' character escapes amidst the chaos with the help of several Stormcloaks, a faction in the game. As players get further into the game plot, they will learn that their character is a Dragonborn, prophesied to defeat Alduin and the dragons.

### **Plants vs. Zombies 2: It's About Time**

Plants vs Zombies 2 is a multi-award, action strategy game developed by PopCap Games in 2009 ('PopCap Game — About Us', 2015). When players start the game, they get to choose which plant to plant on the lawn as defence and offence mechanisms for the coming onslaught of zombies. Each type of plant has unique capabilities to protect the household residents from getting their brains eaten by the zombies. Players can choose sun-producing plants like Sunflower and Sun-shroom to accumulate the planting cost of other plants to be available ('Gallery of Plants - Plants vs Zombies wiki, the free Plants vs Zombies encyclopedia', 2015). Players can choose to plant plants like the Wall-nut and Iceberg Lettuce to act as a defensive mechanism against the zombies by slowing down their advances. They can also plant offensive plants like Peashooter, Puff-shroom, Cherry Bomb and Cabbage-pult to shoot and weaken the zombies. The type of plants that they can plant depends on the level that they are playing in and the availability of the plants to choose from. If the zombies manage to eat their way through the row where the plants are, the final defence line would be the lawnmower to mow the rest of the zombies down in that row. Players would need to hold off the zombie attack until they have reached the allocated time in the level (See Figure 4.1).



Figure 4.1: Plants versus zombies in Ancient Egypt (Loveridge, 2013)

#### Left 4 Dead 2

Left 4 Dead 2 is a first-person shooter game developed by Valve launched in 2009. In this zombie apocalypse game, players need to collaborate with three other players, whether it be other real-world players or non-playable characters to shoot and kill zombies. Players will need to make their way through various places in the Deep South and survive the onslaught of zombies ('Left 4 Dead 2 - GAME', 2015). They can carry and use weapons like firearms and chainsaws, flashlight, first aid kit and other equipment to assist in their mission (Wikipedia contributors, 2015). Players will encounter several types of zombies or Infected as they are known in the game, such as the Common Infected, Uncommon Infected and the Special Infected. In their fight against the different types of Infected, players need to cooperate with their teammates to survive and wait for rescue at the end of the level.

#### Game of War: Fire Age

Game of War: Fire Age is an action, strategy-based MMOG developed by Machine Zone, Inc., played by millions of online players in real-time (Apple Inc., 2014). Players can build empires by choosing to build and upgrade buildings, weapons and armies to win battles. They can join and form alliances with other players to overthrow their enemies in their mission to dominate the kingdom (Google Play Store, 2015). In the course of building their empires, players can ask for help from their alliances when they do not

have enough resources to complete the mission. Apart from playing, players can also chat with other players in the alliance where they can discuss strategies to defeat other alliances and have a personal conversation with selected players. See Figure 4.2 for a screenshot from the Game of War: Fire Age game.



Figure 4.2: Players' view of their empire and quest (Google Play Store, 2015)

### Middle Earth: Shadow of Mordor

Middle Earth: Shadow of Mordor is an action role-playing game inspired by J. R. R. Tolkien's works in both *The Hobbit* and *The Lord of the Rings* ('Middle Earth: Shadow of Mordor - PC - IGN', 2015). Players take up the role of Talion, who was resurrected by an Elven Lord's wraith after he and his family were killed the night Sauron and his army returned to Mordor. Empowered by the wraith, Talion sets out to avenge the death of his family by journeying into Mordor and taking up side missions along the way. Players will encounter various creatures in Middle Earth such as orcs, uruks and caragors. Their relationship with other characters is formed through the nemesis system in the game that remembers who the players interacted with and how players interacted

with them (‘Game of the Year - Middle Earth: Shadow of Mordor - Best Games in 2014 - Game of the Year 2014 - GameSpot’, 2015). As players progress through the game, they will discover more about the wraith’s past and how his background story interrelates with Talion’s vengeful mission.

### Civilization Revolution

Civilization Revolution is a turn-based strategy game designed by Sid Meier, who launched the “God-game” genre through the Civilization game series (Take-Two Interactive Software, 2008) and developed by Firaxis Games. In this game, players aim to rule the world by establishing their civilisation from the ground up. Firstly, players select one of the notable civilisations in history and take on the role of the famous historical leader from that particular period such as Julius Caesar from the Roman civilisation. They will then compete against other’s civilisations for land and glory (CBS Interactive Inc., 2015). To strengthen their civilisations, players need to explore the world, research for technologies, form diplomatic relationships with other civilisations and build armies to destroy their enemies, among others. See Figure 4.3 for a screenshot from the Civilization Revolution game.



Figure 4.3: Players’ view of their Roman empire (T. Erikson, 2010)

### **Angry Birds Go!**

Angry Birds Go!, developed by Rovio Entertainment Ltd. is a racing game for mobile platform (Rovio Entertainment, 2012). Players can choose which kart and bird to race and then launch the kart with a slingshot, much like the gameplay in the Angry Birds franchise. The game offers players two options on how to manoeuvre their kart, either by tilting their devices or touching the screen. During the race, players need to collect sufficient coins along the way to be able to upgrade for a better kart. Similar to many games, Angry Birds Go! was designed for micro transactions, whereby players would need to buy in-app purchases to advance quickly or choose to wait for half an hour in real-time for the birds they wanted to play with to be fully recharged (Plagge, 2013). Alternatively, players can opt to race using other birds and collect crystals on the track as payment to upgrade for a new bird.

### **Assassin's Creed II**

Assassin's Creed II, developed by Ubisoft Entertainment is an action, adventure game set in the Renaissance era (Ubisoft Entertainment, 2014). Players play as Desmond, a modern day man who revisited the memories of his 15th-century ancestor, Ezio to learn the ways of an assassin and seek vengeance for the death of Ezio's family. As Ezio, players can climb walls, move stealthily through crowds and fight enemies with a range of weaponry to achieve their objectives. Additionally, players can take on side missions and return to the main mission that focuses on the main narrative of the game (Ubisoft Divertissements Inc., 2009). Due to the open world environment in the game, players can opt not to follow the mission given to them and just explore the countryside of Italy in the 15th century. See Figure 4.4 for a screenshot from the Assassin's Creed II game.

### **Castle of Illusion starring Mickey Mouse**

A remake of the 1990 game, Castle of Illusion starring Mickey Mouse, is a single player 2.5D platform game developed by SEGA (Dye, Jr, 2014). In this game, players take on the role of Mickey to rescue Minnie Mouse who was kidnapped by the evil witch, Mizrabel (SEGA, 2013). Players travel through the various magical worlds in Castle of Illusion, face head-on with toys and bookworms and navigate their way around the maze to collect gems and other items like chilli peppers. Players would need to collect all seven rainbow gems to defeat Mizrabel and rescue Minnie at the end of the game (Dye, Jr, 2014).



Figure 4.4: Players' view of the character Enzo fighting with a soldier in Renaissance Italy (Good, 2020)

### **Final Fantasy 7**

Final Fantasy 7 is an RPG developed by Square Enix as the seventh instalment in the Final Fantasy game series (SQUARE ENIX LTD, 2015). Players play as Cloud Strife, who joins a rebel group, Avalanche against Shinra Inc., the corporation responsible for destroying the energy source of the planet called Mako energy. As Cloud, players take on missions to blow up the Mako reactor and fight battles against enemies with other members of Avalanche. They can use magic, summons, limit breaks and other abilities when they fight against enemies in a turn-based battle mode (Stevens, 1998). As players progress further into the game narrative, they will discover that the main antagonist of the game, Sephiroth wanted to use the Mako energy for his purpose. Players will then face Sephiroth in the final boss battle and defeat him to help save the planet. See Figure 4.5 for a screenshot from the Final Fantasy 7 game.

#### **4.1.4 Materials**

As participants brought their favourite games to the study on their machines, I have used my machine which has Garageband app and my iPhone app, Voice Memo to record the audio commentaries and question and answer sessions. Both machine and phone were placed between the participant and myself to maximise the audio quality of the

recordings. I have used both audio recorders to ensure that in the event of recording data getting corrupted; a spare recording would still be available for analysis. A video recorder was also used to record the gameplay and for playback during the post-game commentary session.



Figure 4.5: The player choosing a command for Cloud to fight with the enemy (Ifrit, 2019)

#### 4.1.5 Procedure

Before the study started, participants were asked to read and sign the consent form (See Appendix E) with information including the purpose of the study and ensuring the anonymity of the participants. Upon signing the consent forms, participants were given a demographic questionnaire where the questions include age, gender, number of years in the gaming experience, favourite game title(s) and genre(s) if any (See Appendix B). The researcher then briefed the participants of the cued-retrospective protocol so that the participants would know what to do during the study (See Appendix F). They were also informed that the post-game commentaries would be recorded for data analysis purposes using the video recorder.

When observing a think-aloud protocol in their research, Boren and Ramey (2000) found that the evaluators often did not give proper instructions to their participants and did not remind their participants to think aloud properly. Additionally, the evaluators in their research often intervened with inconsistent prompts when the participants were silent for a while and did not use participants' verbalisation as proof for data (Boren &

Ramey, 2000). The briefing before participants starts their sessions addressed Boren and Ramey (2000)'s first two issues in the think-aloud protocol. A list of prompts that have been prepared (see Appendix G) helped address the third issue. To address Boren and Ramey (2000)'s fourth issue in the think-aloud protocol, all data concerning the choices of participants in their games were analysed, including data that seemed to be unrelated. The unrelated data from the resulting analysis were discarded only until at the final step of the analysis.

Each post-game commentary session lasted approximately 60 to 90 minutes where players were asked first to play their games for 20 minutes. After that, the commentary would follow with video playback of their gameplay. The video playback was paused and resumed when either participant or myself wanted more time to discuss a particular key event during the gameplay. In addition to the post-game player commentaries, I had also stopped the video playback to find out more about why the participants made their meaningful choices in the game. Hence, in this study, both data were collected from the post-game player commentaries and additional questions that I had asked the participants during the post-game playback. These additional questions were used to prompt participants into giving a fuller response or clarify what they meant by things that had already said. Some of the questions prompt during the post-game session were as below (See Appendix G) for a fuller list of prompts):

- (a) Can you choose besides playing as... ?
- (b) What went through your mind at this point?
- (c) Why did you choose the \*sword / bow / rifle / weapon over the others?
- (d) Have you played in \*first-person / third-person? Why / Why not?
- (e) How did you choose to get... ?
- (f) What is it that you were doing there?
- (g) Why did you do this rather than doing that?
- (h) Was what you did there important to you?
- (i) Why do you need to kill?

These questions served as guidelines to prompt the participants to explain further on the choice they made during their gameplay. Questions marked with the asterisk sign (\*) were based on the type of games the participants played and at the particular point

of the game that the participants were playing during the recording session. Depending on the game, I have asked the participants on why they chose to play in first-person over third-person perspectives, bow and arrow over swords and other various options.

Participants' chosen games were used for the study as they tended to express more in sharing their experiences that meant something to them. Ad-hoc questions were also asked based on their previous answers to questions asked previously. After the commentary session, participants were invited to ask any questions related to the study. All recordings were switched off at this point onwards. Participants were offered warm beverages and chocolates as a token of appreciation for their time spent in this study.

#### 4.1.6 Transcription of Commentaries

Both Garageband and Voice Memo apps were used to record the commentary sessions. Transcription of the session begins after the part where pleasantries were made, and conversation enters into questions about players choices at the beginning of the game. Pauses and prolonged pronunciation on the last syllable of words were noted as '...' in the transcriptions. Commas and period marks in the text were approximated as closely as possible to the participants' commentaries and responses. Conversation and text from the game were given in quotes to differentiate them with participants' normal responses. '\*\*' used in transcription was denoted for low or mumbled responses during the commentary sessions.

## 4.2 Data Analysis

I used thematic analysis to analyse data gathered from this in-game choices study. Thematic analysis is a method used in a qualitative study to identify, analyse and write down themes formed within the data collected (Braun & Clarke, 2006). Additionally, the approach was used to help organise data so that it could provide a rich narrative on the experience of players, particularly why they make their meaningful choices in their gameplay. As mentioned earlier, grounded theory method would not be suitable for data analytic here as the research questions for this study were more specific rather than exploratory.

In this study, I used three different approaches for identifying themes in my datasets. The first approach taken was the inductive or bottom-up method whereby I would iteratively read through the data for any themes in regards to players' meaningful choices

and not about themes identified in related studies. Through inductive thematic analysis, I have mainly coded from the data, which was based on players' experiences playing the game given. The second approach that I used was coding the data at the semantic level in the analysis. Using semantic coding helped to guide my coding scheme to stay as close as possible to players' meanings instead of interpreting the data itself. Thirdly, using the essentialist or realist approach, which outlined the "motivations, experience and meaning" (Braun & Clarke, 2006) helped drive the thematic process to relate between the meaning, experience and language used by players.

### 4.2.1 Six Phases of Thematic Analysis

Thematic analysis was a flexible and accessible approach in that the transition from phase to phase was not so rigid, whereby the researcher had to move on to the next phase and not revisit the previous phase(s). As generating codes and themes are iterative processes, the thematic analysis allows the flexibility to move back and forth between phases for a further refinement of the themes. Thus, this would ensure that the themes have covered all relevant areas that are pertinent to the data.

There were six phases in thematic analysis as developed by Braun and Clarke (2006):

- (a) Become familiarised with the data
- (b) Generate initial codes
- (c) Search for themes
- (d) Review themes
- (e) Define and name themes
- (f) Produce the report

In the initial phase of thematic analysis where the commentary recordings were transcribed, transcriptions were checked against the recordings at least twice for each session. This checking process was done to ensure accuracy, or at the very least, the closest approximation where word pronunciation and punctuation marks were concerned. There were several inaudible words in the recordings due to the participants' elocution, or words were being said too quickly to be transcribed during the transcribing process. There was also an incident when a participant's voice was drowned out for several seconds by nearby aircraft that flew near the building at the time the session was recorded. However, the instances in which that occurred were few, and I was still able to get a sense of what was being said from the context.

After transcribing the commentary recordings, the next phase was to generate initial codes from the data. Codes were written down in hard copy next to their corresponding data extracts on the transcriptions. These codes were coded based on the data extracts, which were players' experiences in the study, rather than from the earlier identity formation study or literature. In each of the participants' transcripts, code checking was done to ensure that the same codes were used to refer to similar experiences instead of something else altogether. After all of the codes had been written down, they were then transferred to spreadsheets for easier collation and comparison. When comparing codes in the spreadsheets, code checking was performed again to identify whether there were any similar codes between participants. The corresponding data extracts with the codes were scrutinised to ensure that the codes referred to the same experience.

Some examples of initial codes that were generated were 'absence of reward', 'limitation of ability', 'prospect of reward', and 'preservation of character'. The process was then reiterated for each code and its corresponding data extracts to check whether the codes rang true for similar codes in the entire dataset. Codes were also changed to existing codes within the dataset or changed to new codes that would best describe the data extracts. For example, the codes 'alternative approach' was changed to 'counterfactual reasoning' and 'to meet the objectives' was changed to 'achievement of objectives' as the modified codes were found to be more suitable to describe the data extracts. Codes were carried through the analysis when they had distinct meanings that were clearly distinctive from the other codes that were developed.

To illustrate the coding process in the thematic analysis, I have generated 16 codes from the first participant (P1)'s transcript that were related to players' choices such as 'absence of reward', 'counterfactual reasoning', 'in search of objectives' and 'preference of weapons'. I then transferred all the codes and the corresponding texts into a spreadsheet. In the spreadsheet, I then labelled the sheet with the participant's identification number, in this case, P1 for the first participant. For the next participant (P2), I have coded 19 texts that are relevant to players' choices from the transcript and again transferred the codes and corresponding texts to the spreadsheet, with its individual sheet labelled P2. Some of P2's codes included those that were similar to P1's such as 'counterfactual reasoning' and new ones such as 'determination to succeed' and 'efficiency of weapon'. After having coded P2's transcripts, there were 13 similar codes with P1's data and had six new codes. The coding process was then repeated for the remaining participants, with each respective data transferred to its corresponding sheet. At the end of this phase, there were 35 codes altogether.

Once all the data had been fully coded and collated with relevant data, the next phase

involved searching for themes amongst the 35 codes. Similarities and overlaps between codes were identified to check whether the code and its corresponding data extracts could be grouped to form themes and sub-themes. For example, the theme ‘accomplishment of goals’ and its sub-themes which were the ‘achievement of objectives’, ‘confidence to succeed’, ‘determination to succeed’ and ‘in search of objectives’ made up the first theme in the data. There were five prospective themes generated in this phase including a miscellany theme consisting of supposedly unrelated codes. This was done so that no codes were to be discarded in this phase yet. Here, I used affinity diagrams and the spreadsheet’s filter and sort functions to help me group the codes concerning each other.

After the five themes had been generated along with their respective sub-themes, all themes were reviewed to check whether they proved to be significant in answering the research question or not. This phase involved themes in being checked for adequacy and meaningful data to support the themes. Additionally, themes were checked so that they were not too broad or too narrow to capture the relevant data. All data extracts within the same themes were then reviewed together to be scrutinised further. This reviewing process was done so that data extracts correlated with each other and were able to form a coherent narrative description of the theme. At the end of this phase, I had four themes with 3 to 4 sub-themes each to reflect the meaning of the entire dataset. For example, the sub-themes ‘motivation for achievement’, ‘confidence to succeed’ and ‘determination to succeed’ now make up the first theme ‘accomplishment of goals’. Another example of the theme after the review is the ‘contemplation before action’ which now include the sub-themes ‘careful consideration’, ‘counterfactual rationalisation’ and ‘past experience’. The miscellany theme was discarded as its theme and sub-themes did not fit with other themes to form a narrative on the resultant theory.

Defining and naming the four generated themes made up the steps in the fifth phase. Each theme needed to be defined clearly with “clear focus scope and purpose” (Braun & Clarke, 2012), such that the themes were related to each other. However, the themes should not overlap. The four themes that were named in this phase were:

- (a) accomplishment of goals (goals)
- (b) contemplation before action (thoughts)
- (c) management of in-game resources (management)
- (d) continuation of play (continuance)

There was no inter-coder reliability being carried out for the themes and its sub-themes in the study as it was not the nature of thematic analysis (Braun & Clarke, 2017). Inter-coder reliability is a measure of the agreement between researchers on how they code the data (Kurasaki, 2000). Researchers who conducted the inter-coder reliability were trained to see and code the data in the same way. However, this method was not advocated by Braun and Clarke (2017) who believed that the coding of data was flexible and would develop throughout the process. Additionally, coding in the thematic analysis would have the markings of the researcher(s) who coded it and any other researchers who were involved in the process. As there was no singular way to code data, inter-coder reliability does not apply to thematic analysis.

The writing of the report for the study was done in parallel with the tasks performed during the fifth phase. The fifth phase required themes to be written with their corresponding data extracts, not only to relay what participants said by paraphrasing the extracts but to go beyond what was discovered in the data (see Section 4.3). The reporting of four themes, its 14 sub-themes and data extracts were done in such a way that they provided a concise narrative both within the theme and with other themes, which would ultimately be related to the research question of this study (see Table 4.2).

Themes and Sub themes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
<b>A. Accomplishment of Goals (Goals)</b>										
a. motivation for achievement	/	/	/	/	/	/	/	/	/	/
b. confidence to succeed	/				/	/	/		/	/
c. determination to succeed		/	/	/		/	/	/	/	
<b>B. Contemplation before action (Thoughts)</b>										
a. careful consideration		/		/	/	/	/	/	/	
b. counterfactual rationalisation	/	/	/	/		/	/	/	/	/
c. past experience					/	/		/	/	/
<b>C. Management of in-game resources (Management)</b>										
a. resource conservation		/	/	/		/	/			
b. profitable return		/		/			/			/
c. efficiency of weapon		/	/		/	/		/		/
d. prospect of reward	/	/		/	/	/	/	/	/	/
<b>D. Continuation of play (Continuance)</b>										
a. in search of objectives	/		/	/	/	/	/	/	/	
b. preservation of character	/	/	/		/	/		/		/
c. recovery from mistakes	/	/			/					/
d. employment of defence strategy	/	/	/	/	/	/				
TOTAL	8	11	8	9	10	12	9	9	8	9

Table 4.2: Participant (P) in the corresponding sub themes

## 4.3 Detailed Description of the Themes

### 4.3.1 Accomplishment of Goals

Players choose goals that they feel they can accomplish and are persistent in their efforts to accomplish their goals. In their bid to accomplish their goals in the game, they would choose measures that would help accomplish the goals. These goals could either be the objectives that the game offered to players or objectives that the players set for themselves. How they went about achieving those objectives were connected to how confident they felt about achieving them and their keen determination to succeed in accomplishing the goals they had set out to do. Below are details of the three sub-themes and its corresponding data extracts on how players chose to accomplish the goals in their favourite games.

#### **Motivation for achievement**

Players were motivated when they played their games in order to achieve their objectives. They worked on one objective at a time so that they could focus on achieving the objectives. The objectives that players wanted to achieve were ones where they chose for themselves and wanted to achieve, rather than those chosen for them. Their choices gave them satisfaction when they achieved their objectives. They also wanted to challenge themselves by achieving some of the harder objectives. When they achieved these difficult objectives, they were more satisfied with their accomplishments and owed the credit to themselves.

The following were examples of participants' data extracts in this sub theme:

“It does same damage but it's more feels nicer if you trying to hit a smaller area.” (P1);

“I chose to get vomited on. (...) Because in, in that environment, there were zombies hiding all over the place, behind cars, and things like that. That would mean I have to run around to catch them all. But, if you're covered with the vomit, that attracts zombies. So all the zombies will come and just, come straight for you in a, like a frenzy.” (P3);

“What shall we research now and I think I'm gonna choose the alphabet because... (...) so if you have the alphabet, you can do things like build a library and you can get better at science” (P6);

“And so I was glad that he landed there and that he was able to climb up.” (P8).

#### **Confidence to succeed**

Players chose to make certain choices and follow suit because they felt confident that

they were able to complete their goals. They would choose a certain course of action if there was an indication that they felt that they could accomplish the goals. These indications included previous experiences where they became more proficient in certain manoeuvres, making the next foreseeable challenges easier to overcome. Additionally, players could also assess the scenario that they were currently in and whether they were able to succeed in the moves that they were about to make. With this knowledge, players could then have the confidence that they needed to carry through their plan of actions to accomplish their goals.

As the players said:

“So I figured out might as well do the same with that one as well. It’s an easy kill.” (P5);

“What happens is you don’t tend to lose against barbarians because they umm... (...) They’re predictable essentially. That’s the main thing actually. They’re predictable.” (P6);

“Yeah, so although they say it’s hard and I’m quite ahead of it, I finished first. So..it’s not that hard. Just need to start, start well.” (P7);

“But, I feel like I’ve got it now. It’s off my mind. So, umm. Yea. I thought I moved on. Thankfully something a bit easier. Swing it across there. A bit of timing. (Using the lamp rope to swing over) umm, so there.” (P9);

“I just attack from... I do the first bottom part I just attack because I just.. You just kill people with one hit. And if the, if the bottom part where it does more damage.” (P10).

### **Determination to succeed**

Where there is a will, there is a way. The old saying rings true for players in their quest to accomplish their goals. In their determination to succeed, players did their best to accomplish their goals. When they found themselves in a difficult situation, players used any means necessary or available to break free. Players were persistent in this situation as they wanted to carry on with the game and not get stuck in the same situation where their pace of achievements would be slow to the point of almost being stagnant.

To succeed in accomplishing their goals here meant different things to players. To succeed here did not only necessarily mean to win a battle or level, or even to have the highest score. In this context, players were also determined to succeed in achieving their objectives, reaching that crucial game point, and playing the game for as long as they could to stay in the game. In their determination, players would try ‘just one more’ time in their bid to succeed in their endeavours. For these reasons, players chose to do what they did in their gameplay for that one more chance to succeed, even though there was

only a slight possibility that they could make it through. Nevertheless, they did not give up hope in their ability to accomplish their goals.

Following are excerpts from what the players said:

“I’m trying to get back to crouch because two of the others are down. (...) if all four of us are down, that’s it. The game’s over.” (P3);

“So then, I didn’t quite kill it. So I went back here and I used my 20,000 hero energy erm thing. Which means I’m gonna be wasting 6,000 and odd but on the other hand, I got it free, so I might as well use it. But I know that with this final one, I will kill the monster properly. So, umm..I might as well do it.” (P4);

“So I try again. See if I can do it. You know, if you try enough times, you get enough coins, you upgrade it eventually be able to do it. It’s a matter of umm, being persistent in some sense” (P7);

“So, and also he can climb up windows, so..i thought well, I’ll give it a go. And if we fall down, umm, just start again” (P8);

“I’m trying to get, I know that’s there. So I walk... I don’t have to get to it. I know it’s just a bonus. But I’m determined to. So, really get past these blue books. Trying several times. So I need to double back on this so, that gets me every time. I don’t know why. Umm, and I have to go over here but missed that now. Going again each time, slowly starting get used..” (P9).

### **4.3.2 Contemplation before action**

Before players chose which course of action they would pursue in the game, they would take a moment (long or short) to contemplate on the advantages and disadvantages of each action. They did not choose their next steps in the game based on a whim. Instead, players considered carefully what they needed to do to get the best if not, better outcomes from their actions. Apart from this, players rationalised with themselves on counter facts where they acknowledged the pros and cons of alternative approaches to possible actions. Their past experiences playing the game also lent a hand in choosing which course of actions would serve them best in the game. As such, players want to progress further and better themselves by choosing the right course of action in their gameplay. Below, I have described in detail these sub-themes with their corresponding data extracts on how players contemplated on their actions before acting on them in the game.

#### **Careful consideration**

When faced with a situation where careful planning was needed, players would take

a few moments before choosing which move to make in their game. Just like the idiom “look before you leap”, players would take great care in considering the next approach that would benefit them in both the long and short run of their gameplay. At this point in the game, there was a thought process that took place whereby players asked themselves the questions of ‘should they’ or ‘shouldn’t they’. Players would consider whether they should go take a particular route or not, change to certain weapons or keep the current ones, or distribute their resources in a specific area or another for better returns in the latter part of the game. Carefully considering their options, players determined for themselves on which course of action would suit them best. This careful consideration was done so that they would experience the outcome of their gameplay with gratification.

As the players put it:

“Now I have a little bit more, I can plant something else. Had to decide carefully what to plant” (P2);

“But now, yeah I set off the alert so and there’s lots of guys chasing me, I’ve decide to run away and maybe re-evaluate where I want to attack instead.” (P5);

“So this is a new caravan that I’ve got. Umm, and I’m looking for a place to put it. So I’m looking for somewhere which has a good mix of this green which is grass and also the woods coz you need the green for food and the woods for umm building things. So, I can’t. that’s probably the best I could find.” (P6);

“So now I make sure I’ve got my knives, my throwing knives. So, I think at that point, I was like thinking, well, am I gonna need the close combat thing, where am I gonna need the throwing knives. And..there’s some sort of thought process going on there and I in the end I decide to use throwing knives into the distance thing” (P8).

### **Counterfactual rationalisation**

Before players chose which course of action to proceed with, they would contemplate on the different facets of the actions that they could choose. They were aware of the consequences of possible actions, having weighed both the advantages and disadvantages of such actions. Players rationalised their actions of choice by contemplating each of the alternative routes that they could take in the game. They would mull over the course of action and which of its consequences would be the one that they preferred over the other. After having rationalised their options, players then chose the action that would most likely facilitate their advancement in the game. The consequence of the action that they chose would be the one that ultimately benefits their gameplay. By rationalising over their chosen actions, the players made a firm basis for their chosen actions as they considered the pros and cons before making their decisions.

As the players put it:

“And if I had a shield, it wouldn’t do any good because shields don’t cut magic unless you enchant them” (P1);

“So, while they are frozen, I can try to put plants that will kill them. If not, I cannot kill this one. I put this plant here that would pull it down” (P2);

“So, part of the strategy for me at least is not to fight battles where I think I’ve got a chance of losing” (P6);

“So, I’m sure I’m not supposed to go here. Yea, I know i guess he run to one of the soldiers here. He got a choice to fight them all or not fight them. but there’s no point fighting him” (P10).

### **Past experience**

Players have become proficient in choosing which course of action over the other having played the game before. Even if they have just encountered a particular game point for the first time, that moment will serve as their past experiences when they encountered a similar game point later or replayed that bit of the game. Their previous experiences with the gameplay have provided them with the familiarity of the ins and outs of the game. With this knowledge of what would happen should they choose a particular course of action, players were able to deliberate over other actions that would lead them to a desirable outcome. Additionally, with their previous experiences, players were able to avoid choosing an action that would hinder them from accomplishing their objectives. They would use their experience with the game to improve their future or next gameplay by not repeating any misstep they did earlier.

As the players revealed during the session:

“But because this boss has this strength, that won’t work. (...) This, I should have scanned him like the last one, I should have scanned him and work out his strength as well.” (P5);

“There are, there is tutorial which I didn’t use umm this time coz I’ve played it before. Umm, but even the tutorial doesn’t explain that many things. So a lot of this things I think are things that I’ve learned and the reason to why I’m doing it like this, are based on kind of experience” (P6);

“And then I thought, oh, last time I did that coz that’s where I pull that guy off and, but it didn’t work that time. Maybe I just didn’t do the controls for long enough.” (P8);

“You see he got stuck on to there, that push him off. Right So, now I’m thinking about, this time. See, it’s that, it gives that play ability, replay that. So you know, I’m thinking about this time, uh I know what’s, how it works. I will do it this time” (P9);

“If, if he kills all the soldiers, they’ll just get replaced again. And the same scene plays out, and there’s no point fighting.” (P10).

### 4.3.3 Management of in-game resources

In games, resources such as coins, gold, points, stars, and ammunition need to be managed with care. Players can amass their resources throughout the game and use them as payment or bargaining chips to acquire upgrades and weapons among others to have an advantage in their games. They would need to be efficient in using these resources to their advantage that they could reap in their future gameplay. In choosing which resources that would benefit them, they would choose the course of action that would potentially help them economise their resource usage with the added benefit of getting a profitable return for their effort. Moreover, in the case of choosing weapons, players would choose the ones that would help them for its efficiency to meet their objectives in the game. Players went for choices that would help them economise their resources regarding effort taken, money and time. Below, I have described in detail the sub-themes resource saving, profitable return, efficiency of weapon and prospect of rewards that motivate players to manage their resources in the game.

#### **Resource conservation**

When there was an opportunity where they could save their resources to achieve their objectives, players would take it up without hesitation. The potential amount of cost that they could save helped give room for another course of action that might need it. When the game offered players an upgrade free of charge, players would take this as a golden opportunity to advance further in their gameplay. Players also chose a course of action that would help them be more efficient in managing their in-game resources. They would be able to save more time and effort moving from one game point to another and perform better at fulfilling their objectives.

According to what the players said:

“And the first, I have to select plants that will cost nothing so you will have here this purple mushroom that will attack zombies for free” (P2);

“Umm, if...if you run out of ammunition on one of your weapons, it’s quicker to switch between weapons than is to reload. So if you empty your clip with the machine gun, it’s easier to switch to the other weapon than it is to reload the machine gun.” (P3);

“Umm, because it’s much quicker to move things on the road. Umm, so, at the moment, umm, these horses can move two squares. where as anything moving from one city to

the other city along the road, that's just one square. (...) Which means that it's good for have, you know, you don't need as many resources because you can move them when you need them." (P6);

"Now use this speed up, err feature. The first one is free. The next few ones, they'll consume err this err this crystals that you can collect as well." (P7).

### **Profitable return**

Players chose their actions to accommodate not just for the immediate consequence, but also for the distant future of their gameplay. In other words, players chose their course of action by way of investment for their future gameplay. As with any investment plans, players expected that their chosen action would yield a high return for their efforts. This high return would then enable themselves to be successful in their bid to succeed in the game. Given the fact that every action has its consequences in the game, players' choices would determine, for example, which character they would meet, which scenario would play out, and what they could gain from it. If they wanted the outcome of their gameplay to be such-and-such, they would then choose their course of action that geared them up for the event that they wanted.

Following are excerpts for this sub theme:

"You save the money for the time you needed. So, in those occasions, I will use the money. But now, I'm just playing for fun. I'm not gonna waste the money all the time." (P2);

"So for example there's this stone production here, umm by clicking on that it means an increase the amount of stone that's produced per hour by each of my umm quarries. So you know it's a good thing to increase up. You also get more power per hour of research from upgrading one of these" (P4);

"Umm, I go normally for the one that increases this value the most coz some will be plus 7, some will be plus 10. Some be plus 11. Coz that, that will open more levels, right? So, I try to go for that one" (P7);

"Yea, I chose to buy her flowers. (...) There's a scene later on in the game where you kinda date with one of the characters. And whoever you gonna date was determined by the actions you do earlier on." (P10).

### **Efficiency of weapon**

To choose a weapon that was based on how efficiently it could inflict damage was an important factor for players in the game. Without the efficiency of their weapons, players

would most likely fail in their objectives or take a longer time than expected to fulfil their objectives. Apart from weapons used to inflict damage, players chose the type of weapons that would help facilitate their advancement in the game. By choosing a more efficient weapon, players could save more time and effort to move on to the next challenge of the game. However, if they chose a less efficient weapon, their in-game progress might suffer a setback. They would then have to redouble their efforts, which would take additional time to achieve their objectives in the game.

As the players put it:

“So, in this case, I use this purple power up eh, gives me kind of err an electricity power that will allow me to kill every zombie with my finger. So I can just, you know slide my, my finger around the screen and each zombie I will.. touch with my finger will die.” (P2);

“Umm, that is why I got them (horses) umm in the first place. Umm, because they can move really fast. Umm, so I can go and see what’s out there.” (P6);

“These are throwing knives and these are good at for umm, you know when someone is at a distance and he can like target them and get rid of them.” (P8).

### **Prospect of reward**

Players chose a course of action because they were expecting a reward once the deed was done. These in-game rewards could be in the form of more experiences, items or power that players could use in the later part of the game. With this being said, the prospect of getting rewards throughout the game has prompted players to expect that their choice of actions would be advantageous to their gameplay. Rewards were an integral part of the game as players needed them to progress further and equip themselves with a better arsenal of skills and abilities. The rewards would also provide them with better leverage that they could use in dire situations should they need them. Furthermore, the rewards could be spent on getting bonuses and upgrades as advantages for their gameplay. Players could be frugal in spending the resources that they had and use their rewards earned as payment instead.

As the players put it:

“Umm, I’ve doing some read on it, on some building that’s been building the embassy. So, I’m upgrading that. I’ve got some gold gathering research and I’ve got some traps being built at the same time. So, umm, with each of those I’ll get more power” (P4);

“I mean, letting the Caragor eat them, gives him a bit of health back. But I think it is, it was mostly just because they were near and I want to salvage something.” (P5);

“So I moved it to the Americans to Washington and I’ve made some money which is a,

which is umm covered by my finger here. Haha. 50 gold I think. But the Americans get some money as well. So, we all win” (P6);

“Umm, but there is a treasure at the end of that, that counts towards something else. So, there is a good reason to do that mission” (P8);

“so I used to have, you know, it’s worth going there. I found my bonus” (P9);

“You can get items but you also get experience. So you can have a lot.. and you get various of experience from those guards” (P10).

#### **4.3.4 Continuation of play**

When players sat down to play their favourite games, they wanted the experience to last for as long as they could manage it. They would do all they could to prolong their gameplay and were thus motivated to choose their next course of action for this purpose. Another critical choice that players made was how they preserved the lives of their character or avoid their character being killed off. This choice of self-preservation was to ensure that they could continue to play the game. Even so, they could still make mistakes here and there but chose a recovery action that would get them back on track. To continue playing their game, players would employ strategies to defend their characters and stronghold, even when they were not being currently attacked. With that, I have described these four sub-themes below.

##### **In search of objectives**

Players searched for objectives as their motivation to continue playing the game. Although searching for objectives usually occurs at the beginning of the gameplay, players were found to continue looking for objectives throughout their gameplay. They would search around in the game environment itself for feasible objectives to carry out. These objectives could either be ones that the game presented to players or objectives the players created themselves to fulfil other objectives. Players would also actively seek objectives throughout their gameplay as something to do rather than just amble aimlessly in the game. Searching for objectives give players a purpose to fulfil, that would be meaningful to themselves as they intentionally seek out to experience the game their way.

Below were examples of participants’ data extracts in this sub theme:

“So, here I decided there was nothing around. So, I wanted to go somewhere where I could kill more things. So, the..basically, all I could think of was Morthal, which is that city over there.” (P1);

“So now I’m having a look to see which buildings to upgrade, coz no research to upgrade here coz I already have some research going.” (P4);

“This tell me I have to go and kill these two guys. Just some of the war chiefs, and it’s giving me a bonus objective to kill them using the ledge attack. Umm, and I always try and do the bonus objectives.” (P5);

“Uhm, I’m trying to see which mode I will get er coins. So I go for this mode now where I need to collect all the fruit” (P7);

“Umm, that’s quite a good lonesome jelly. Umm, might wanna have a look. Fall through the jelly, how it feels there. It feels like..like an experience. Umm, I was just looking up there to see any bonuses up there” (P9).

### **Preservation of character**

Players would take measures to keep their character alive when they were being currently attacked in the game. These measures aimed to preserve the ‘lifespan’ of their character and consequently their gameplay. Players would have either searched for methods to heal themselves to avoid dying or even run away from conflicts if they felt that they were not equipped to fight battles where they were sure to fail. They would choose the best course of action to avoid their character being killed off in the game. If their character died, that would mean the end of the game for them. They would then have to continue from a saved point, with the assumption that they did save their gameplay earlier or they may have to start from the beginning of the gameplay again. Nevertheless, players want to preserve their character for as long as they could so that they might be able to continue playing the game.

As the player puts it:

“My health points were a little bit down because the dragon hit me. So, I decided to wait for a few hours and instead of using a healing potion or healing magic because I’m a vampire in the game. And the vampires don’t heal on their own during the day. This was day time. So, I decided to just wait until the night coz there was no enemies close by. Umm. And now it’s night time and I’m fully healed.” (P1);

“Aar, and you won’t be damage because you have this nut like a wall, like a...something’s that blocking zombies from coming your way” (P2);

“And then I’m surrounded by uruks and there’s more coming so I decided it’s probably best to run away very shortly. (...) And they’re throwing stuff and so I’m like ‘nope, screw this. I’m out of here’.” (P5).

### **Recovery from mistakes**

In real life, everyone makes mistakes. Games are no exception. Unlike real life situations where recovery from a mistake might not always be possible, players have the

opportunity to do so in the games they play. They could choose to either replay from a saved point, restart a level, or replay from the beginning. Players chose this route so that they could have a fresh start in their gameplay, without their mistakes looming over them. Players could also choose another course of action to remedy their mistakes by choosing another route to go or a weapon to use, for example. With this recovery, players aim to regain control of their game play and improve their skills in the game. Although they might repeat their mistake, they know that they could recover from it to make their gaming experience the way that they wanted it to be. Once recovered, they would then be able to continue with their gameplay to attain the experience that they wanted in a game.

Players who chose to recover from their mistakes in their game play indicated as much in the following:

“And, I saw that the wall I wanted to go was through there so there was no way I could jump. I decided to go on the side which I should have done in the first place” (P1);

“And then, I made that mistake. So you see it there is a golden mushroom there. And then I took this, there is a tool here. It’s a shovel that can use to unplant your plant. And then it will give you back there’s this little sun. It will give you back a part of the cost of the plant. (...) That, so in the end, yea you can erase your mistake and you will recover something if you look at it in a positive way. It’s not at all a lost.” (P2);

“So I think I missed. And end up just shooting a few times to like stoke his health.” (P5);

“I did ice last time, that was a mistake. went to do bolt but I just have different one” (P10).

### **Employment of defence strategy**

To ensure that they can continue playing the game for a longer period, players employed strategies to defend their character and stronghold from any future onslaught. They employed these strategies when they were not actively pursued by in-game enemies. Taking advantage of these ‘quiet’ times, they would then reorganise their strategy so that they could remain playing for a longer time. Fuelled by their natural instinct to defend and protect themselves and what was theirs, players chose strategies that would help them ward off attacks and come out victorious in fights.

Below are excerpts for this sub-theme:

“I started walking backwards there. I saw the Jockey. But then yea the specially infect, if you start moving, they’ll pounce on you basically. So if you keep moving and changing direction, they’ll miss more often” (P3);

“So I stood to climb on that box, and now I realised he was actually, he’s fallen back. So, I hid instead. And then he sees the uruk and goes to attack the uruks. So I leave him alone.” (P5);

“I’m moving back, so I’m reallocating the horses because I’m a bit worried by this Egyptians so they put to defend and they’re defending here coz I kinda explore everywhere I can go” (P6);

“All I think it does is people, all want to get the money. So, it can slow down guards and things like chasing you. So, I’ve just switched it to money. And I throw the money and everyone was going crazy for the money” (P8).

## 4.4 Discussion

### 4.4.1 Summary for players’ meaningful choices

In this study, I have found four main themes in players’ meaningful choices when they play the games that they have chosen:

- (a) Accomplishment of goals (Goals), whereby players are motivated to achieve their objectives and that they are confident and determined to succeed;
- (b) Contemplation before action (Thoughts), whereby players have considered their choices carefully, rationalised the counter facts of the available course of actions coupled with the knowledge from their past experiences with the game;
- (c) Management of in-game resources (Management), whereby players have conserved their resources for future usage in their gameplay, have chosen which weapons for their efficiency and the prospect of being rewarded for their actions has spurred them to manage their resources better;
- (d) Continuation of play (Continuance), whereby players continually search for objectives as a mean to do something in the game, employ defence strategies to preserve their characters and recover from any mistakes made to continue playing the game.

These four themes occurred throughout their gameplay where each theme was also interrelated with one another. Players shape their gameplay through the course of actions that is of significance to them. They accomplish their goals so that they would be able to continue playing their games. In their pursuit to accomplish the goals, they would contemplate first before choosing a course of action. Players would want to ensure

that they are able to manage their in-game resources efficiently, which would then enable them to continue playing their chosen game. See Figure 4.6 for the relationship between the four themes.

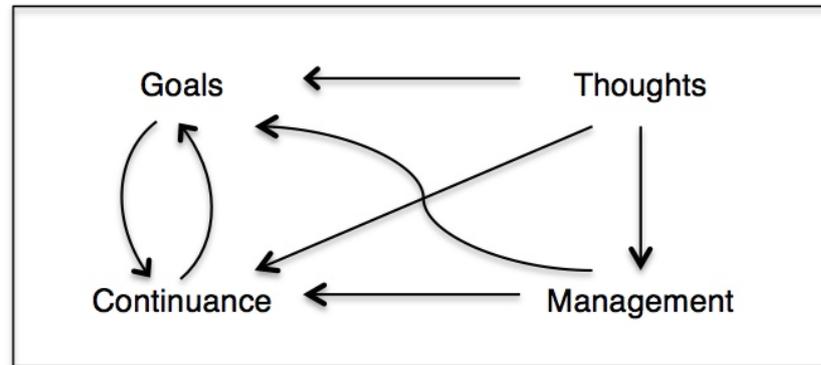


Figure 4.6: Players' meaningful choices through their goals, thoughts, management and continuance

Players would also strive to manage their in-game resources efficiently to be able to accomplish their goals in the game. They would contemplate before making their choice on which action would consequently allow them to continue playing the game. As shown in Figure 4.6, players' goals, thoughts, management and inclination to continue playing the game helped form their projective identity through the meaningful choices they made during the gameplay. Players have given considerable thought to how to accomplish their goals, manage their in-game resources, and continue to play their chosen game. They think about what they want to achieve and what they can receive in return, subsequently choosing a suitable course of action to follow through. Not just by simply doing it, but behind each meaningful choice made, players have contemplated on the hows and whys of their actions that would affect their gameplay.

In their chosen game, players' intrinsic motivations drove their extrinsic motivations in making their meaningful choices during their gameplay. Their intrinsic motivations from both real world and gaming experiences shaped how they choose their course of actions in the game. Players' sense of achievement, self-confidence and way of thinking in determining how they made those choices were driven by what they believed they could get out of their chosen course of action. They were extrinsically motivated to reap the benefits from their gameplay such as better weapons to defend themselves and more in-game currencies to buy items that they needed so they could continue playing

the game. Their identity formation through meaningful choices was such that players chose their path (through their course of actions in the game) to make their experience meaningful and personal, having been able to express their thoughts into action. Players were found to continue making choices that were meaningful to themselves throughout their gameplay. These choices then lead to forming their projective identity a continual progression when they are playing their chosen game, rather than a specific game point in which it occurred.

Similar to this study, the identity formation study employed grounded theory and found that players' meaningful choices were the central key to players' projective identity in digital games. Players were found to have made meaningful choices in their choice of character, goals, gameplay and completion (see Figure 3.5 on page 59). There have been several similarities between the identity formation study and this in-game choices study such as players searching for objectives, preservation of character and rewards, among others. One example in the identity formation study showed that players could choose whether to accept the game-given mission or make their objectives and pursue them in the game. In the in-game choices study, players searched for in-game objectives so that they could continue playing the game. Another similar example from the identity formation study is the players' choice to preserve their character as part of their strategy game play. This self-preservation of character can also be seen in the in-game choices study where players employed strategies to preserve their in-game character so that they could stay in the game.

On the other hand, both studies are different regarding the scope of the investigation. The identity formation study investigated at the high level how players formed their projective identity when they played, whereas the in-game choices study investigated how players' meaningful choices unfolded during the actual game play itself. This in-game choices study has discovered why players made those choices during their gameplay which led to the goals, thoughts, management and continuance. Moreover, this study analysed the goals from the identity formation study whereby players were able to describe the whats, whys and hows they go about achieving the goals in the game. As the players had been playing their game for a while before the study started, the study did not capture how players made their choice in choosing their characters when they started playing the game at the very beginning.

Although the two studies investigated players' choices in games, both studies yielded different results, which consequently yielded different theories on players' experiences (see Figure 3.5 and Figure 4.6). Both of the identity formation and players' choices studies are different in scope and result because they focused on different aspects of

players' projective identity and experiences in games. The identity formation study looks at players' projective identity formation on a higher level whereas the in-game choices study looks into how players' meaningful choices occurred on a lower level. Even though the in-game choices study did not examine how players chose their character, the study did show how players chose the other aspects of their game play as investigated in the identity formation study.

One contribution the in-game choices study has made was that the study had discovered how and why players made their meaningful choices during gameplay. In one example, in games like *Plants vs Zombies* where the player could choose which plants to battle with the zombies at each level, the player based those choices on whether the selected plants would help win the battle and at the same time, use the limited slots given for the needed plants efficiently. These choices in managing their resources would influence whether the player can accomplish the goals or not. In turn, when the player can accomplish the goals, the player can continue with the game, having survived the level and move on to the next level of the game. As the players had to stop playing at the end of the 20 minutes of recording session, they did not have the luxury of choosing how to complete the game or having the sense of completing the game as what had been discovered from the identity formation study.

Using the post-game player commentaries method as a reflective account of players allows players to see themselves playing the game and then talk about it. They were able to point out which part of the game play was important to them, for example, their determination to succeed, preservation of character, the prospect of reward and thoughts. These four examples in players' gameplay can be seen in the identity formation study through the aspects of players' competitiveness. Players' drive for competitiveness are manifested in their determination to succeed (goals), preservation of character (continuance), the prospect of reward (management) and thoughts, as mentioned earlier. In essence, competitiveness can be seen in the actual gameplay where the competitiveness is break down into goals, continuance, management and thoughts. With this breakdown, the in-game choices study is suggested to function at the micro level of the identity formation study in what players actually do during the gameplay.

Another aspect of the first study is personal development where players have made meaningful choices to develop their skills and received rewards for their efforts. In this study, players managed their in-game resources in particular when choosing a weapon that is effective to accomplish their goals. With the right choice of weapons, players can achieve the goals and gain the knowledge that the chosen weapons are more efficient for specific situations. For that matter, the players developed their skills in choosing the

right weapons or tools, for a better outcome and rewards of their gameplay.

Players reasoned their capabilities on whether they could go down a certain path and still be able to accomplish their goals or not. They weighed the pros and cons of the available choices before they would make one that is meaningful to themselves. Players have their own goals; so does the character that they are playing as in the game. It is how players merged their goals with the character's so that they would be able to continue playing the game for as long as they could. Together with their in-game goals, players' in-game experiences (thoughts) gave them food for thought on how best they could develop their game play to their liking and satisfaction.

Gee (2005b) described projective identity as active and reflexive because the players were actively doing things in the game. Also, players have made their choices on their character which enables themselves to do further things with the developed character. In the in-game choices study, players had been actively thinking about their choices, setting the goals, managing their in-game resources so that the outcome of these choices would allow them to continue their gameplay. Players have also continuously made meaningful choices so that they could look back on their gameplay and know that they have played the game better, making their gameplay a memorable and meaningful one.

This in-game choices study shows that other players apart from Gee do form their projective identity, as can be seen from the players' reflective accounts. They have been found to stop and think of their choices before they proceed with the game and how their choices can benefit their gameplay. Moreover, this study focused on players playing games from different genre backgrounds whereas many existing studies have focused on RPG genres and games with avatars and characters.

### 4.4.2 Players' chosen games and genres

As shown earlier in Table 4.2 (page 102), all participants were found to be in each of the four themes: goals, thoughts, management and continuance. However, there were a few instances where participants were found to be in only one sub-theme of a theme. Although this study used a qualitative approach, it is of interest to take note of these singularities which occurred in the analysis to be explained in detail. Participant P1 was found to have a singular occurrence in the themes 'thought' and 'management'. P1 had only sub-theme 'counterfactual rationalisation' for theme 'thought' and sub-theme 'prospect of reward' for theme 'management'. The participant has previously completed playing his chosen game of the RPG genre, in the sense that he had completed the main narrative of the game itself. Although the participant had completed the game and knew every nook and cranny, so to speak, the participant's chosen game remained one

of his favourites and he relished playing the game again. He has made his character very powerful to the point that he has not much difficulty in defeating other characters and creatures in the game. Consequently, this leads to his game play being more for his enjoyment as he has a lot of resources to spare and he has become highly experienced in the game.

Similar to P1 who had completed playing the game, there was another participant P3 who had also completed playing his chosen game (FPS genre) after achieving all the objectives given. His single occurrence in theme ‘thought’ was where his actions were due to rationalisation of the counter facts of choices. The participant knew what to expect in the game and thus knew what he should or should not do. Given that he had played both *Left 4 Dead* and *Left 4 Dead 2*, he had become proficient in playing that game franchise. He knew the layout of the game, do’s and don’ts when his character moved around the zombie-infested area.

Participants P7 (played the racing game) and P9 (played the platform game) were found to have a single occurrence in the theme ‘continuance’, where they chose to search for objectives to be able to continue playing the game. Although there was no opportunity for the players to choose how to preserve their characters, recover from their mistakes and plan a defence strategy, players still wanted to play by searching for more objectives to carry out. Their continual search for more objectives was so that they could extend their gameplay for as long as they wanted to.

P9 had another single occurrence in theme ‘management’ where he chose to manage his in-game resources for reward prospects in the game. P9 have wanted to collect as many stars in the game as he could. Even if he could not achieve that during his first attempt, he would try again just so that he would not miss any rewards that were available in the game. Additionally, the prospect of rewards had him pushed himself through the challenging levels in the game, thus allowing him to collect all stars in the levels.

With the study consisted of different game genres chosen by participants, there came a question on whether the game genre has an impact on how players form their identity. This could have possibly led to many studies on RPG and MMORPG genres (such as Hayes (2007), Fuster et al. (2014), Doh and Whang (2014), Murphy (2004), Niman (2013)) as there are visible characters or avatars that players see as a self-representation in the games. However, given the data in Table 4.2, players playing games from genres other than RPG and MMORPG were able to form their projective identity across the four themes. Not just due to the genre, but the players themselves, affected how their attributes manifested in playing out the game that contributed to their forming their projective identity. Moreover, given that these players made meaningful choices in their

favourite games, it is worth investigating how these games became their favourite ones to play. How players chose a game to play, especially ones that would eventually become their favourite game, can provide more insight into how players form their identity in games. It would be worth investigating how players' preference for a game can help form their projective identity.

### 4.4.3 Comparison with existing literature

There were several themes found in the in-game choices study, which have found support with those mentioned in existing literature. Firstly, the theme 'contemplation before action' that players chose to make was consistent with the Edwards (1954)'s theory of decision making. Over the years, Edwards' theory has been theorised, applied and improvised to better apply to individuals' needs in the ever-evolving real world for example in Montano and Kasprzyk (2016), Atkinson (1957), Wulff, Mergenthaler-Canseco and Hertwig (2018). Although Edwards' theory was conceived years before the release of the first video game, it still has relevance to support players' experiences in making their choices during gameplay. There is one theory of decision-making from Edwards' work that has relevance to how players contemplate before they choose to act when they play, which is the theory of riskless choices (Edwards, 1954).

In the theory of riskless choices, it is assumed that individuals know what actions are available to them and the consequences of those actions (Edwards, 1954). Individuals were then said to be completely informed, which was one of the attributes of an 'economic man'. Dated sexism aside, Edwards (1954) theorised that the economic man should have all the information he needed about the actions and its outcomes, be infinitely sensitive about where the choices could lead to and be rational in how to choose the best course of action. In the in-game choices study, players considered carefully on the available actions that they could act upon, having considered the consequences of their actions. However, players' choices were not entirely riskless as they contemplated on which choices to make. Players merely lowered the risk of what their choices would bring them to the next step of their gameplay.

One aspect of Edwards' theory of riskless choices was rationality, which supported the players' theme of counterfactual rationalisation in the study. In the theory of riskless choices, individuals prioritised their choices to choose the best alternative for themselves (Edwards, 1954). They did this by either weakly ordering their choices through preference or indifference of choices and then make their choices based on the best result they could get from it. Similarly in the in-game choices study, players were found to rationalise with themselves by counteracting the alternative routes and choosing one better choice

over the other. During game play, players were often presented with the different choices that they had to make to proceed in the game. They would weigh out their choices and visualise what would have happened if they had chosen one route over the other, and which outcomes would be the most beneficial for their gameplay.

Another theme from this in-game choices study, the counterfactual rationalisation theme, concurred with the works of Roese (1997), Epstude and Roese (2008), Roese, Smallman and Epstude (2017). Instead of the term counterfactual rationalisation, Roese (1997) used the term “counterfactual” to describe individuals’ thoughts about alternatives of their past that would produce both positive and negative consequences. Individuals would think about what might have been should they have chosen to follow a thought (Epstude & Roese, 2008) or what would have happened should the past have some different aspects than the actual past (Roese et al., 2017).

In counterfactual thinking, individuals would think on both the antecedents and its consequences (Roese, 1997). Their counterfactual thoughts occurred when they were in a situation that needed corrective thinking (Roese, 1997), much like the sub-theme ‘counterfactual rationalisation’ whereby players rationalised their choices on the ‘if...then...else’ actions. Players would weigh on the possible actions and acknowledge the ‘what-ifs’ and its consequences. They would then wait for the game to unfold to see whether they had made the right choices or not. Unlike in the real world, players can go back in time, in the sense of gameplay where they could either replay the level or go back to a save point. From there, players can choose other paths to move forward in the game, which is something not possible in the real world. These choices made are meaningful to them as they know they have the agency to shape the outcome of the gameplay.

In the game, players did not always experience smooth gameplay, in the sense that they did not always win at every turn. Players themselves also did not expect to win at every challenge they faced as they wanted the opportunity to master the challenges presented and be competent in the game (Rigby & Ryan, 2011). However, there is an upside to this supposed failure in winning. Juul (2009) explained that failure has a role in games whereby when the players did win after failing, they would enjoy the game better. Players’ determination to succeed in achieving their goals, a theme found in this study, has helped to push players to recover from their mistakes or failures (another theme found in the study) made in the game. Failure in their gameplay did not deter players to stop playing. Instead, their failure drove them to try again, so that they could master and overcome any weakness or mistakes made (Gee, 2005a).

Players’ ability to recognise and learn from their mistakes made it a valuable experience enabling them to make a better choice in their next step. By recovering from

their misstep, players were determined to succeed in accomplishing their goals. Failure to recover from their mistakes was not an option when they were given the opportunity to remedy their mistakes. After having failed to accomplish their goals because of a mistake made, players used this moment to review their strategies and analyse what worked and did not work, and then proceed to choose an action that would bring them back on track (Juul, 2013). Their subsequent choices when recovering from their mistakes gave players the opportunity to have another go in accomplishing their in-game goals. The opportunity to recover from any failures or mistakes made their choices much more meaningful as the choices could lead them to a win or another failure.

Moreover, players were both intrinsically and extrinsically motivated to achieve their objectives in their chosen game. Their intrinsic motivation stemmed from their aspiration to be satisfied that they were able to overcome the challenges and accomplish their goals (Ryan & Deci, 2000). Their accomplishment of goals would then lead to them being extrinsically motivated where they were able to carry on with their game play. Their penchant for wanting to overcome the challenges presented in the game led them to inspire themselves to see how far they could go into the game in achieving their objectives (Gee, 2003a). Furthermore, players' confidence in their ability to accomplish their goals through their chosen course of actions drove them to have a hand in their desired outcome (Garris et al., 2002).

Players also wanted to continue playing their game to satisfy their psychological needs of being competent to overcome challenges provided in the game, motivated to being in control of choosing their course of actions and being able to interact with others (other characters or players) in the game (Ryan & Deci, 2000). Good games with its narratives and challenges, to name a few, were not sufficient to sustain players' interest and motivation as games need the capability to engage the players to continue playing the games. Players want to engage in the game when they are enthusiastic about their gameplay and want to continue accomplishing their objectives in the game (Schoenau-Fog, 2014). Schoenau-Fog (2011) described players' desire to continue playing as a fundamental factor for engagement and successful players' experiences. In the in-game choices study, players have wanted to explore their chosen games where they could discover what other challenges the game would present to them and how the narrative would unfold during their gameplay. Players' desire to play, continue playing and play again helped motivate them to search for more objectives, among other continuance aspects from the current study. With their desire to continue playing the game, their choice of games seemed to influence how players could form their projective identity.

## 4.5 Summary

When players play, they make meaningful choices so that the outcome of their choices make their experience a meaningful one. The four above mentioned themes are interrelated with each other, helping to explain what choices they had taken, which choices were meaningful to them and why these choices had meaning for them. Also, as the study comprised players playing their favourite games, it would seem that their meaningful choices were influenced by the choice of games that they have played. In the next study (Chapter 5), I have investigated how their choice of games can affect their making meaningful choices and its relation to their formation of projective identity.



## Chapter 5

# Players' Expectations Study

In analysing his experience playing games, Gee proposed that players can form their projective identity when playing games. Regrettably, Gee has neglected to mention how he came to choose the games that he had discussed in depth in his works. In his works, he had only said that the games he discussed were the ones he likes, and no further information was offered. Perhaps, players must have to have like a game enough for them to play to form their projective identity, but there was no empirical evidence to support this claim yet.

The identity formation study found that players formed their projective identity through their meaningful choices in their favourite games. The in-game choices study, which employed the post-game player commentaries method investigated how and why players made their meaningful choices in their chosen game. In that study, players chose their path in the game by expressing their thoughts into meaningful action. They also wanted to continue playing their chosen games to satisfy their psychological needs (Ryan & Deci, 2000) and to sustain their engagement with the game (Schoenau-Fog, 2014). Their interest in continuing their gameplay and consequently their continual making of meaningful choices in games suggested that their choice of games had an impact on how players formed their projective identity in the games that they played.

Both of the meaningful choices and in-game choices studies suggested that players' very first choice, which was choosing their favourite games, have framed all their other choices, specifically their meaningful choices when they play their favourite games. Their choice of games that eventually became their favourites could make a difference in whether they could fully form their projective identity or not. If the players' choice of game matters to the formation of projective identity, how do players choose the games they want to play?

Thus, the aim of this study is to address this research question: what are the mechanisms that make players choose a game worthy for them to make their meaningful choices in the game?

### 5.1 Methodology

As the objective of this study was to investigate the mechanisms that affect players to choose their games to play that would eventually form their projective identity, I have used grounded theory to help answer the exploratory nature of the research question. Even though the players' expectations study was the last study for this thesis, the research question was deemed exploratory because there was no study done on how players' choice of games can affect their forming projective identity. Grounded theory method was used for the players' expectations study to develop new insights and grounded theory, as there were no existing theories that explained why players choose a game (Corbin & Strauss, 2008).

Similar to the identity formation study, grounded theory had been used in this study to guide the data collection and data analysis. During the data collection phase, the data from each interview session was transcribed and analysed before moving on to the next interview session. The transcription and analysis of data were done to direct the questions in the next interview session (Corbin & Strauss, 2014). Memos were also written during the interview session for analysis with the interview data. Moreover, grounded theory was employed in this study to ensure that the resultant theory would be saturated and grounded in data.

#### 5.1.1 Participants

Through this study, a total of 11 participants were recruited via theoretical sampling. Participants who were recruited had at least played more than one game so that the study could discover how and what led them to choose a particular game over the others. Once the study had reached theoretical saturation, participant recruitment was stopped. The study was aimed to gain insights and understanding on how players made their meaningful choices when they chose which games to play and how the game(s) became their favourite. A recruitment advertisement was placed on a student association Facebook page looking for participants who played computer, video or mobile games and were willing to spend 1 to 1.5 hours for the study. The advertisement also mentioned that participants would be rewarded for their time spent in the study. Participants were also recruited through email and acquaintances. The interview session was conducted in an informal environment to

<b>Id</b>	<b>Age</b>	<b>Gender</b>	<b>Occupation</b>	<b>Nationality</b>	<b>Gaming Experience</b>
P1	22	Male	Student	Malaysia	5 years
P2	31	Male	Civil Servant	Malaysia	24 years
P3	23	Male	Student	Malaysia	10 years
P4	39	Male	Student	Singapore	>10 years
P5	23	Male	Student	UK	15 years
P6	29	Male	Student	India	20 years
P7	30	Female	Student	UK	20 years
P8	24	Male	Student	UK	18 years
P9	26	Male	Student	Greece	21 years
P10	23	Male	Student	UK	19 years
P11	28	Female	Student	Saudi Arabia	>10 years

Table 5.1: Demographic of interviewed participants

encourage a free flow of conversation. The games that participants discussed consisted of different genres such as real-time strategy (RTS), RPG, FPS and TPS. As seen in Table 5.2, players have listed more than one of their favourite games, and therefore the interview session consisted of them talking about their experiences with all of their favourite games as well as their general gaming experiences. None of these participants has taken part in the previous studies.

### 5.1.2 Materials

Before the study started, consent forms were given to participants to read and sign where the information included the purpose of the study and ensuring the anonymity of the participants (See Appendix H). Upon signing the consent forms, participants were given a demographic questionnaire where the questions included age, gender, number of years in the gaming experience, favourite game title(s) and genre(s) if any (See Appendix B). I used a Macbook which has Garageband app installed to record the audio commentaries and interviews. Additionally, I had placed a mobile phone with a Voice Memo app between the participant and myself in case the length of recording ran out for the Garageband which has a maximum length of 90 minutes of recording. Both audio recorders were used to ensure that a spare recording would still be available for analysis in the event the audio file was corrupted.

<b>Id</b>	<b>Favourite Game(s)</b>	<b>Genre</b>
P1	DotA 2, Assassin's Creed Rogue, Sid Meier's Civilization 5, Far Cry 3	MOBA, action-adventure, turn-based strategy, FPS
P2	Fallout series, Metal Gear Solid series	RPG, action-adventure
P3	Final Fantasy X, Tearaway, Thomas Was Alone, Guacamelee!	RPG, platformer adventure, puzzle and platform, metroidvania
P4	StarCraft, Age of Empire, Warcraft	all RTS
P5	Mass Effect 1-3, Half-Life 2, Fallout 3, Bioshock, Company of Heroes, Battlefield 2	action, RPG, TPS, FPS, RPG, FPS, RTS, FPS
P6	Bioshock Infinite, Dishonored, StarCraft, Splinter Cell, Tomb Raider	FPS, action-adventure, RTS, action-adventure, action-adventure
P7	Baldur's Gate II, Vampire: The Masquerade - Bloodlines, Red Orchestra	RPG, action RPG,  tactical FPS
P8	Metal Gear Solid V, XCOM: Enemy Unknown	action-adventure, turn-based tactics
P9	Planescape: Torment, DotA, Fallout 3, WoW	RPG, MOBA, RPG, MMORPG
P10	Eve Online, Cities: Skylines, Call of Duty 4, Fallout series, Final Fantasy 8, Elder Scrolls III: Morrowind, Beneath a Steel Sky	MMORPG city-building, FPS, RPG RPG RPG, adventure
P11	Bubble Shooters, Subway Surfers	puzzle, platform

Table 5.2: Participants and their favourite games

### 5.1.3 Procedure

Before the study started, participants were asked to read and sign the consent form with information which included the purpose of the study and ensuring the anonymity of the participants. They were also informed that the interview would be recorded for data analysis purposes. Each interview session lasted approximately 1 to 1.5 hours. Interview sessions were held in a small vacant office room in Universiti Malaysia Sarawak and Home Lab in the University of York. Questions asked during the interview session were semi-structured such that the following areas were covered (See Appendix I for full interview schedule):

- (a) What did you like about this game?
- (b) Is there a specific game genre that you like to play?
- (c) Why have you chosen to play this game?
- (d) How did you come to know about this game?
- (e) What persuaded you to try out this game in the first place?
- (f) Have you tried playing other games in same genre before? How about different genres?
- (g) How do you compare playing this game compare with the other games that you have played?
- (h) What attracted you to this game?
- (i) What did you expect out of playing this game?
- (j) What made this game stand out from the others that you have played?
- (k) What was the deciding factor or the decision point in the game when you realised that the game would be your memorable one?
- (l) Has playing this game become an important aspect in your life? Why is that?
- (m) How do you know that you have found 'The Game' for you?
- (n) How do you represent yourself in the games that you chose to play?

These questions served as guidelines to prompt the participants to explain further why they chose to play their games. Ad-hoc questions were also asked based on their previous answers to the questions asked previously. Questions asked during a previous interview session were revised for the next interview according to the analysis of previous interview transcription. After the interview session, participants were invited to ask any questions related to the study. All recordings were switched off at this point onwards. Participants were offered beverages and souvenirs from Malaysia and the United Kingdom as a token of appreciation for their time spent in this study. Data collected during this session were transcribed and analysed for the next session.

### 5.1.4 Transcription of Interviews

Transcription of the session begins after the part where pleasantries have been made, and conversation enters into questions about players choices at the beginning of the game. Pauses and prolonged pronounced on the last syllable of words were noted as ‘...’ in the transcriptions. Commas and period marks in the text were approximated as closely as possible to the participants’ commentaries and responses. Conversation and text from the game were given in quotes to differentiate them from participants’ typical responses. ‘\*\*’ used in transcription was denoted for low or mumbled responses during the interview. Moreover, not all of the audio recordings were transcribed as only parts of conversations that were relevant and important to the research question were transcribed. Conversely, only parts of the conversation that covered players’ experiences in choosing games were transcribed.

## 5.2 Data Analysis

Data collected from all 11 interviews were analysed using grounded theory. Just as in the identity formation study, after each interview session, the audio recording was transcribed and analysed to steer the direction in the next interview. In the instance where ‘\*\*’ was present in the data, the sense of what has been said in the sentence was understood from the context it was described during the interview.

In this players’ expectations study, more than 60 concepts were formed during the initial stage of the analysis, which were then refined to 15 concepts related to the theory of identity in digital games. The theory and its aspects will be described in Sections 5.3 and 5.4.

### 5.3 Fulfilment of Players' Expectations

The central theme of the theory on players' projective identity when they choose the games to play and how the chosen game eventually becomes their favourite ones to play, lies in the fulfilment of players' expectations. Players' motivation to play affects how they choose a game to play in. Their motivation of play drives toward choosing games that can fulfil their expectations. The context and players' sensibility for the chosen games determined how they chose the games that they could be motivated to play in. Players could then expect that their chosen games would be able to fulfil their expectations. This fulfilment of players' expectations comprises their expectations to be able to express themselves on their terms and that they can showcase their achievements in their chosen games. When their expectations are fulfilled in the chosen games, these games then become their favourite ones where they can make meaningful choices in the games. In Figure 5.1, fulfilment of players' expectations is shown as the central theme of the theory.

Players are motivated to choose a game that they can expect to enjoy, having things to do and socialise with other players, be it co-located or remotely. Players expect to enjoy the game where they have chosen to set aside time to play. They also expect to have a variety of things to do in the game, whether they get to choose their objectives or be given an objective by the game. Also, players expect to play socially with other players when they choose to play in a multiplayer game. Although there have been other games that players have played before, they will come back to choose the games that are hoped to fulfil their expectations in games.

However, the context and personal sensibility of the game determines the sort of games that players are motivated to play. The context of play here refers to games where players' real-world situation affect their motivation to play. Players choose games that can fit with their real-world schedule as the chosen game can affect whether they can play the game meaningfully or not. Players expect that games with more significant objectives will require more playtime and smaller objectives will require a shorter time play. Another expectation from a chosen game is that players wanted games that are convenient for them to play so that they can easily fit the playtime into their schedule. Players also expect that playing the chosen game to be effortless, in the sense that the gameplay will not require complicated moves that will require much effort, be it in short or long gameplay.

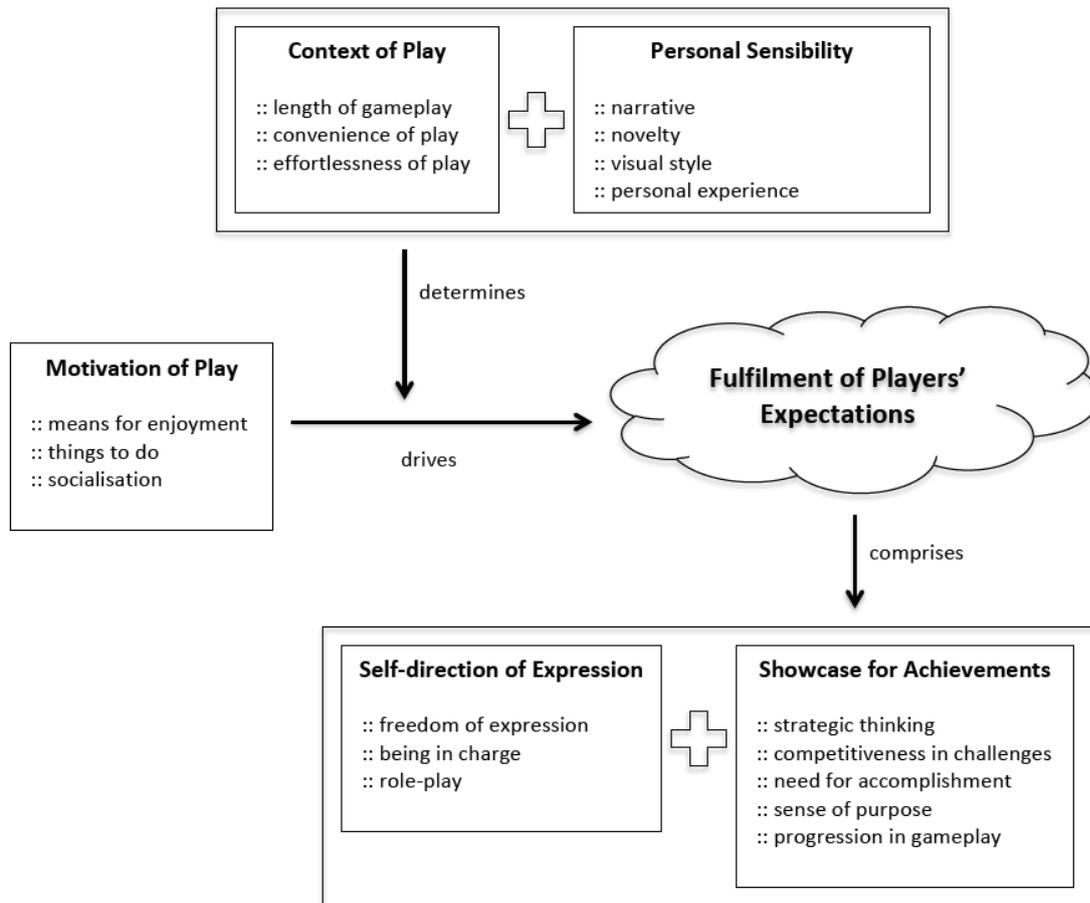


Figure 5.1: Fulfilment of Players' Expectations, being the central theme of the grounded theory

Players have also chosen games that have the personal sensibility which they could respond to in the game. They choose games where they expect to experience elements of narrative, novelty, visual style and something reminiscent of their personal experience that is present in the game. Players expect the chosen games to have the narrative that can draw them into the gameplay, which will help make for a better gaming experience. As they have played several games before, they want games that are new and different from what they are used to experiencing. Another personal sensibility that draws players to a game is the cinematic gameplay that can immerse players in the chosen game. Players are drawn towards games that have the visual style that they seek to augment their gaming experience further. Moreover, players draw on their personal experiences that is a reminiscence of their previous gameplay and shares their real-world interest in the game, which influences their choice when choosing which games to play.

Players expect their chosen games to be able to direct their own in-game expression and showcase their in-game achievements. Players expect games that will allow themselves the autonomy and flexibility where they can choose their own path through their freedom of expression, being in charge of their gameplay and role-play. They want to be able to freely express themselves in games where they can not do so in the real world. Players want to be able to take charge of their gameplay in that they can shape how they want their gaming experience to be. Moreover, players expect games where they can express themselves through role-playing, a feat that might not be possible in the real world.

Additionally, players expect their chosen games to be a platform where they can showcase their in-game achievements. They want games where they can show themselves and other players that they have mastered challenges with the abilities and skills gained in the game. Players want to be able to demonstrate their strategic thinking skills which help them to achieve their objectives. They also want games that can cater to their need to be competitive, especially games that can challenge their skills and abilities. Players expect games that can fulfil their need to accomplish the objectives given just like games that can give them a sense of purpose when playing. Furthermore, players expect games that will help them to progress and improve their abilities and skills from when they started to when they ended the game.

When players' chosen games help fulfil their expectations, these games become their favourite ones to play where they can then make meaningful choices in the game.

## 5.4 Detailed Descriptions of the Theory

In this section, I will describe in detail the aspects of the fulfilment of players' expectations in regards to players' projective identity. The first aspect, motivation of play that drives players towards fulfilling the expectations of their choice of game, will be described further with supporting quotes from the players. Next, the two aspects that determined how players choose the games, the context of play and personal aesthetic response will then be described in detail with supporting quotes from the players. Lastly, players' self-direction of expression and showcase for achievements aspects will be explained and supported by players' experiences.

Due to the prompting, players have mostly talked about their experience with their favourite games. By way of contrast, they have also referred to other games that they have played. There have been many of these instances, and players' quotes were added

as well for the contrast between the experiences in their favourite and other games. With each of the players' excerpts, I have included the games that players referred to so that the readers can relate players' experiences with their games. Some excerpts are without any game reference as players shared about specific expectations they would want in a game.

### 5.4.1 Motivation of Play

When players choose a game, they want a game that they are motivated to play. Not just games that have caught their interest, but games that they could get something out of playing them. Players are motivated to play a game where they can perform and do things in the game and socialise with other players as well. Moreover, players want games that provide them with enjoyment for their time spent in the game. When players are motivated to play their chosen games, they then expect that the chosen games will be able to fulfil their expectations in the game.

#### Means for enjoyment

Players expect to enjoy playing the game that they have chosen. They want games where they can enjoy, which matters to keep them engaged with the game. Players would not play games that they would not enjoy as it would be a waste of their time and effort that would have otherwise been best spent playing other enjoyable games. When they have achieved that state of enjoyment, they want to continue playing so that they can experience that feeling of enjoyment during the gameplay. As one player put it: "I play to enjoy" (P11).

Below are excerpts for the subcategory 'means for enjoyment':

"I mean, I would like the game after that. If I don't like the game, I usually stop. Like within level one itself or two. If it doesn't, like if it's really boring, I will stop it." (P6);

"Like I find myself quite enjoyed being a tanker. And uh, satisfaction of taking a tank out from god knows, how many hundred yards and, um, sorry, hundred metres." (P7 on Red Orchestra);

"So...this is just after they released the demo, I played the demo. Thought it was fun." (P8 on XCOM: Enemy Unknown);

"But, uh, it's not about the win so much. It's more about you know, playing, having a nice moments, playing good. Regardless of the outcome." (P9 on DotA);

"Yeah, Bubble Shooter is more relaxed way for me. I feel it's a more relaxed. I play to enjoy." (P11 on Bubble Shooter).

### Things to do

Players want games that allow them to play outside the conventional format. After having played the chosen game, they would evaluate their experience on whether the game managed to fulfil their expectations of having a variety of things to do in the game. They want the ability to do things in the chosen games to avoid boredom or tediousness in their gameplay. Also, players want to explore and push the boundaries in games to find out for themselves how much they are able to express themselves. They can get creative with their gameplay knowing that there is no one way to achieve the in-game objectives. Games that allow players to “just do what you like” (P4) helped players to be able to do a variety of things during gameplay. With almost unrestricted freedom, particularly in RPG related genres, players are given the opportunity to explore uncharted areas, pick or discard items, kill, maim or ignore opponents and so on. With various things to do in games, players could make their experience more meaningful as opposed to being forced to play in a particular way. That way, they are motivated to play their chosen game when they can do various things in the game.

Below are excerpts for the subcategory ‘things to do’:

“You get quite a number of quest, get quite a number of side quests, quite a number of characters, and you can do so much in this one particular game. So that’s the reason why is, I’m quite, I’m so fond of RPGs. There’s, I will have to say that my favourite genre will have to be RPGs.” (P2 on Fallout series);

“But not so dramatic that you must do quest. Because there are many options. You can do multiple quests, so you can just do what you like. So there isn’t a time pressure to do anything.” (P4 on StarCraft, Age of Empire and Warcraft);

“Um, to play the different character classes. And I think there are certain things you can do differently in the story to get different endings. So I played it through to get the different endings. And to play with some other classes.” (P7 on Baldur’s Gate II);

“Basically, um, a space pilot and it’s very um, open ended in that um, you can go sort of mine, or mine asteroids or com, going to combat or trade on...that sort of open-endedness, it really appeals to me?” (P10 on Eve Online).

### Socialisation

The potential for being able to play games with friends have motivated players to choose games they could play with their social circle. They use games as a place to meet up with friends virtually and play together. Although they are only able to play socially in multiplayer games, players search for games that would serve their purpose. Playing with friends helped players strengthen their relationship where they could stay in touch

with each other through games. Games with social playability allow players to build friendships across the globe through groups of players such as in alliances, clans, guilds and teams. By being a member of these groups, players could enjoy the camaraderie with other players in the game where they could otherwise not achieve in other environments. Moreover, players have a sense of belonging to the group of players where they could go on missions and complete quests together. Social playability in games would also lead players to be better players regarding their self-direction of expression and showcasing their achievements when they play together.

Below are excerpts for the subcategory 'socialisation':

"Uh, If I don't have friends, I don't usually play that because it was very boring to play with AI bots" (P1 on DotA 2);

"But what attracts me then first was the, the way you talk about, you can have network with, with other people. And uh you start forming team versus team type of thing. So it's, I won't say it's peer pressure, but peer influence that makes you, wants you there, to play together." (P4 on StarCraft);

"I wanted a game where I could play with friends, uh which that, it gave me that." (P7 on Red Orchestra);

"And then, for things like Call of Duty and EVE Online, there's also the social aspect. I like playing with people. I don't get to do it that often. Mainly because they all play different games." (P10 on Call of Duty and EVE Online).

### 5.4.2 Context of Play

Earlier, we saw how players' motivations could affect their choice of game. However, the two aspects, which are a context of play and their aesthetic response to the chosen games determined players' choice of games where they could be motivated to play in the game. Players chose a game to play based on its context that they could fit their playing time in the real world calendar. One such context that players considered when choosing a game is the length of gameplay that they would expect to spend their playing time. Playing their game of choice should also be convenient for them such that they could easily 'play in, play out' at any time they wanted. Lastly, players wanted games that did not require much effort to just pick up and play without needing much assistance from the game or other players.

### **Length of gameplay**

Players choose a game based on how much they are willing to devote their time to the game. The time that players expect to spend in the game differs with each game as they need to fit it in with their real-world calendar. Players weigh the pros and cons of their choice of games knowing that each game has its own objectives that have varying time lengths to complete. They anticipate their gameplay would be as long or short depending on what objectives they want to achieve in the game. Thus, before they choose the game to play, players already have in mind whether they want to spend a long or short time to play and whether the game's objectives can cater to their needs or not.

Below are excerpts for the subcategory 'length of gameplay':

"Assassin's Creed maybe, uh one sitting. Uh, actually it takes a short periods of time. So, maybe I'll play for one hour and then rest and have a lunch an hour over and I'll play again until uh yea.." (P1 on Assassin's Creed Rogue);

"And then I found out that the game is only about, you can beat it in seven hours. It is an action game third person action, with very, very, very pretty graphics and you can finish it in seven hours, that was the one that actually finally make me decided." (P2 on The Order: 1886).

### **Convenience of play**

Just as players look for games with gameplay time that can accommodate their needs, they also choose games they can play them conveniently. Players want to be able to play the game where they will not be interrupted so that they can focus on their gameplay. Moreover, players want games that they can just pick up and put down, and does not put much strain on their personal schedule. When the game is readily available to play, players will get to spend more time in the chosen game. They are then able to play more meaningfully as opposed to playing games which can be more inconvenient at times.

Below are excerpts for the subcategory 'convenience of play':

"So like the game I'm playing, this Rival Kingdom, they, they, they, I think they understand this. They have the, the concept of doing some quest in like 3 minutes. You finish something in 3 minutes. And that's it. You go on, you go on with your life." (P4 on Rival Kingdom);

"And even with the lifestyle that um now, I prefer, yeah, just play in the train, in the car, the bus, and just finish and go. It's like a casual thing. You play, turn it off and continue." (P11).

### Effortlessness of play

Another aspect of players choosing games based on its context of a play is how effortless it is to play the chosen game. Effortlessness here does not necessarily mean the chosen game is easy to play. Instead, players choose games where they think that they will not expend much effort while playing. Players use games as an escape from their real-world schedule in which they use up a lot of effort on things they do in the real world. They would want to choose a game that does not need much effort to play compared to the amount of effort they spend in their real-world undertakings. A game that can provide effortlessness of play to players is appealing to them, and they would then choose that game to play.

Below are excerpts for the subcategory 'effortlessness of play':

"Um, I really like the gameplay and the interface. The interface was the how the player, how to say it..er, I really like the system in the Assassin's Creed where the player don't really have to, um, learn very much from the game." (P1 on Assassin's Creed Rogue);

"I don't know why but it's just maybe it's more like puzzle type. Uh, for to do puzzle and don't need to think too much, just breaking thing." (P4 on Candy Crush);

"So, Bubble Shooters' the way. If I don't like to think of anything, just go Bubble Shooter. Yeah, don't want to think of uh, I'm not sure. Sometimes you feel this stressful and yeah, just go for the easiest way like Bubble Shooter." (P11 on Bubble Shooter).

### 5.4.3 Personal Sensibility

Players' experience with games has influenced them on their next choice of game. With many attractive games available for players to choose from, nonetheless, not all games can attract many players to play them. Games elicits a different aesthetic response for different players as players have their sensibilities on what may appeal to them in games. These different aesthetic responses play an essential role in how players choose their games to play. Players may want to play games with appealing game narratives, novelty, gameplay ability and visual style that could aid in fulfilling their expectations in games. Among these personal aesthetic responses, players may put one game aesthetic as a higher priority than the others in their search for games.

Nevertheless, players still place other game aesthetics as being significant when they are choosing which games to play. For example, player P2 preferred a visually attractive game such as Metal Gear Solid compared to Assassin's Creed, another visually attractive game but with predictable gameplay, the opposite of novelty play in games. They then placed other game aesthetics on a lower priority than the ones they sought to fulfil

their expectations. It is not always the case where players are able to find all the game aesthetics that are equally appealing in a single game. I will further explain each of these subcategories below in regards to players' aesthetic responses to games.

### **Narrative**

Players look for games with narratives that would appeal to them. As the players involved in this study have played at least more than one game and have at least a favourite game, they have already experienced and have expectations of the type of narrative in games that they are attracted to. In this context, the narrative in games refers to the pre-determined plot written by game developers and choices made by players that would determine the course of their gameplay. Game narratives appealed to players where they could discover what would happen next when they chose a mission to follow or when they walked through an entryway that would lead them to an unexplored area. They were curious about how the game narratives would unfold through their actions and decisions made in their gameplay.

For players, games with appealing narrative were an indication of promising gameplay that would help pave the way for them to achieve and express themselves in the game. Moreover, the narrative in games helped players make sense of what the game was all about and how their in-game actions could influence the gameplay to make their own narratives as well. Players were attracted to game narratives that could help steer the direction of where and how the game would turn out towards the end of the gameplay.

Below are excerpts for the subcategory 'narrative':

"First times can play the game and then the system and the game, the, the game's plot story is very enter-, entertaining and very educational also because they include a lot of history facts there, and yeah." (P1 on Assassin's Creed Rogue);

"But that is not actually the main reason why I got hooked up to the, it's more on like it has a good, it has some sort of storyline that keeps on trying to, that keeps pulling you in. okay, so you want to know what happen after that. So the main reason of that particular his main mission is to do this, and then you just want to know that what goes along after that. Apart from all of the cheesy dialogues and all that lah. Yes, have quite of number of interesting characters." (P2 on Fallout series);

"The blocks of colours have different name and different abilities. They work together to get out of some containment, something, I don't know. But, the story doesn't, doesn't really make sense. But, the character, the narration is very engaging." (P3 on Thomas Was Alone);

"Even if it's mm, even if the story is broken like you have missions that the stories

within themselves. I think that's important as well as the whole narrative." (P7 on Baldur's Gate);

"Uh, in uh, well, in Planescape, yes, it was definitely the narrative. I want to see what will happen in the end. I definitely want to see what will happen in the end." (P9 on Planescape: Torment).

### **Novelty**

Players like games that are a novelty compared to what other games have to offer concerning the narrative, gameplay, characters, graphics and so on. To players, a novelty in games are games that stand out from other games, that offer a different experience than what they would typically have experienced in other games. Players would seek out games that offer different and better features than the ones that they are used to. They would check their choice of games through game synopses, players' reviews and recommendations to judge for themselves if the game would be a novel one. Should their curiosity be piqued in the prospect of the game, players would then want to play and experience the novelty for themselves.

Although players tend to seek games that are reminiscent of their previous gameplay and of similar themes to what they typically experience, they want newer games to offer a different and better setting. To play games that are a novelty for themselves is to prevent their gameplay experience from being dull and predictable. Their need for novelty in games is akin to still wanting that favourite flavour of chocolate ice-cream, but to add on sprinkles or chocolate dip on the ice cream itself.

Below are excerpts for the subcategory 'novelty':

"Uh, the first one, is kind of actually kind of similar with a film, very unique visual style. Like it's, there's not many games, like it came up with it's own architecture and styles that are based on those obviously, behind. But, there, there is like an original universe that um, has some really interesting uh species and um, design and story and stuff. So there's never been in a game before coz it, it's an original universe." (P5 on Mass Effect 1-3);

"And it was, quite, I won't say scary, but it was quite thrilling. And it was quite jumpy. And it was done in a way that I haven't experienced before. So, I kind of really enjoyed that. and then when I completed it, I was yeah, this is brilliant. " (P7 on Vampire: The Masquerade);

"You know, you learned how to, you get past them coz the story is so good. uh, and I like that [...], it doesn't use too many cliché's like the character is, is original. [...] He doesn't go out to save the world like a, like everyone in every single video game, they

go out to save the world and you know, save their hometown, save something.” (P9 on Planescape: Torment).

### Visual style

Games with visual style appeal to players for its cinematic gameplay and visual aesthetics. Visually attractive games that support its narratives are deemed attractive and help to influence players into choosing which games to play. Players may have come to know of certain visually attractive games from playing games that were from the same series, developed by recognised game developers, advertorial campaigns, past gameplays and so on. These experiences help players choose whether the games were visually attractive for themselves so that their experience in the chosen game would be pleasing and enjoyable. I will discuss more on players’ aesthetic responses that comprised cinematic gameplay and visual aesthetics below:

#### (a) Cinematic gameplay

Players are attracted to cinematic games or games with cut scenes that imitate life in the real world. The cinematic gameplay brings about film-like quality that players enjoy as a reward when they have completed objectives in the game. In cinematic games like Metal Gear Solid and Diablo, players have the opportunity to experience film-like games added with realism, which they could reap as their reward after having “to play those games just to see that” (P6). Also, players are drawn to cinematic gameplay where they can make better sense of the game narratives to find out “what’s going on” (P6) in the game. They want to get to the cut scene segments of the game even though the cut scenes could take more time to watch than the actual gameplay itself. They do not mind sitting through the lengthy cut scenes, and have even come to expect “15 minutes of gameplay and then another 20 minutes of cut scenes” (P2). Despite the long cut scene screen time, players want games that resemble a film but still have the agency for players to determine the outcome of their gameplay.

Below are excerpts for the subcategory ‘cinematic gameplay’:

“The way they set it is like a movie itself, means you have uh this full motion, not, not to say full motion video. We have cut scenes, and then going to the mission itself. The way the dialogue is, the way the characters, the way the dialogue and all of the setting up is more like an action movie. So that, that is what charc, err, the, the thing that Metal Gear, Metal Solid Gear is much different from Assassin’s Creed is in a way it’s more like an straight forward action movie” (P2 on Metal Gear Solid series);

“The only reason I used to play these games, even Diablo I used to play, just to see the

cut, the video, like after you play the campaigns, after like 4, 5 levels you will find one. Find the cut of the story, what's going on. just to see those. I'm pretty sure most of my friends, we, we all play those games just to see that." (P6 on StarCraft);  
"But even go into that, I was hoping that secretly there was going to be some crazy 90 minute cutscenes somewhere in the middle." (P8 on Metal Gear Solid V).

### (b) Visual aesthetics

As players are going to spend a significant amount of time in the game, they look for games that are aesthetically pleasing to make their experience more enjoyable and engaging. Players perceive aesthetically pleasing games as an indication that the games have followed up with the current trends, which helped make it stand out from other games. Although each player has a varying degree of visual aesthetics, their need for aesthetically pleasing games helps make their gameplay experience a meaningful one. Visually aesthetic games do not necessarily refer to high-end resolution with 3D graphics games. Instead, some players tolerate simple graphic style, as long as the game "design itself of how the world looks and how the lighting is set up is really good" (P8). Players' need for aesthetics games stemmed not just for wanting to see graphically pleasing games, but that would help them engage with the game itself.

Below are excerpts for the subcategory 'visual aesthetics':

"But the setting itself of the game, the beautiful graphics, it actually got me, it caught my eye and then I started purchasing actually, prior to the announcement of The Witcher 3, I purchased The Witcher and The Witcher 2 from Steam." (P2 on Witcher series);

"Like, I need to play it on full resolution. I will not even play on like, normal or...(...) Resolution. Like, when I'm playing a game, I wanted to work on ultra settings. If it's not working on ultra setting, I'm not playing it." (P6);

"There's Redemption and Bloodlines. Bloodlines is the second one so it's slight graphically better. I've never played Redemption, it just looks terrible." (P7 on Vampire: The Masquerade);

"But I feel like I would still enjoy it if it's on low settings because the, the design itself of how the world looks and how the lighting is set up is really good." (P8 on Metal Gear Solid V).

### **Personal experience**

Players' personal experiences with games consist of reminiscences of previous gameplay and similar real-world interest found in the game. They want to recreate

these experiences in the games of their choosing based on what they had experienced both in games and real-world scenarios or interests. Players want to experience in games what they had experienced elsewhere before. They want to be able to relate to the game, in a way that is familiar to them from previous gameplay and personal interest in the real world. Based on their personal experience, players want a game that would eventually fulfil their expectations in the game such that they could express themselves when they played and achieve what they set out to do in the game. To quote Mac Taylor from the TV show ‘CSI: New York’, “It’s the events in our lives that shape us, but it’s our choices that define us” (Targum, Byrd & Sudduth, 2012).

(a) reminiscences of previous gameplay

While players play the game, they reminisce about their previous gameplay; what they like and dislike when they play. The previous game that they have played could be from the same game franchise, another game with similar gameplay to the ones that they are currently playing, or that they have just played in a game. Players have come to expect the type of quality that they have experienced in previous games, if not a better experience, which drove them to choose the current game to play. Even though they have already finished playing the game, players can choose to play the game again to relive the memorable gameplay experience. The previous games they played and enjoyed were then used as a benchmark when choosing a newer game to play. They wanted to recapture the experience where they were able to express themselves and achieve what they wanted in the games. Also, players’ dedication to particular game franchises stemmed from their previous gameplay with the franchise where they were impressed with the game. Players’ reminiscences of their previous gameplay would also have a bearing in whether the newer game would be able to fulfil their expectations or not.

Below are examples of players’ ‘reminiscences of previous gameplay’:

“the reason uh Fallout and Metal Gear will always be there is because one is the nostalgic value of course. I still can’t get rid of the, I’ll always remember myself playing the old Fallout, still remember the setting, the late 90’s setting playing Fallout. You know that is why I said that I do believe that’s nostalgic values has the, has an effect on what sort of games that you want to play when you still want to continue playing that series.” (P2 on Fallout and Metal Gear Solid series);

“Just to remind me the feeling of finishing that game. The first time. Just to remind me how it feels. Ah, it bring backs memory.” (P3 on Ragnarok Online);

“Because I’ve been playing the series since it started. Right, I’m, so invested in the series now that I’ve played all of the games, I bought a PlayStation 3 just so I could

buy, play Metal Gear Solid 4. I almost bought a PlayStation 4 so I could play Metal Gear Solid 5 but then it came out on PC.” (P8 on Metal Gear Solid V);

“Um, I think I’ve played Oblivion and Fallout 3 kind of came out, it’s this sort of, it’s Oblivion with guns, guys. So, it was really interested after I heard that.” (P10 on Fallout series).

### (b) related real-world interest

Players seek games where they can experience and explore their real-world interest in games. Their interests in the real world have prompted them to look for games with similar interests in the game. They could further explore their real-world interest in games when they could not have done so in the real world. Take for example, how players who like football choose a football-related game where they could either play the role of football players or football managers with similar rules in the real world game. There are also those who like role-play in traditional board games such as Dungeons and Dragons, and would thus look for games with role-playing elements. These players want to play games that hold their interest, in which they have already enjoyed in the real world and thus hope to enjoy playing or reliving in these games. By finding games that correlate with their real-world interest, they would be assured that they have made the right choice of games to play. They would then want to keep playing the game for as long as the game contained their real-world interest.

Below are quotes from participants on their ‘related real-world interest’:

“I like art style. (...) Like I think Bioshock, Fallout, Mass Effect in particular have a really interesting art style.” (P5 on Bioshock, Fallout and Mass Effect);

“Uh, I’m an old RP player. I used to play Dungeons and Dragons. So that kind of appeal a lot” (P7);

“But it’s like I was going through school at the same time. So, it’s like I could, the characters were a little older than me but I can sort of relate to them more. Um, you know I think most people when they play 8 (Final Fantasy), they say they can’t relate to Squall because he’s so sort of introverted and inward and all that.” (P10 on Final Fantasy 8);

### 5.4.4 Self-direction of Expression

One aspect of the fulfilment of players’ expectations when they play their chosen game is their self-direction of expressing themselves in the game. When playing the chosen game, players reflect on whether they could express themselves in the way that they wanted to in the game. With this freedom to express themselves in games

when they cannot do so in the real world, players feel that they are in charge of their gameplay. By being in charge of their gameplay, players can make their own choices in how they want their experience to be. They have also thought on how they have fared in role-playing as in-game characters to express themselves where they cannot in the real world. These are the expectations players expect to fulfil regarding their ability to express themselves in the chosen games. I will describe further each of the subcategories how players expect to express themselves in their chosen games.

### **Freedom of expression**

Players want games in which they can show their ‘real’ selves without needing to worry much about the repercussion of their actions from the game world affecting their real world. Players take advantage of the incognito-ness and anonymity that games provide because they can choose not to give out their actual names, show their faces or expose any personal information in the game. They feel freer to express themselves in the chosen games and re-engage with the game that could fulfil this expectation.

Below are excerpts for the subcategory ‘freedom of expression’:

“Because uh it’s a real person, a real person but you don’t really see the face. But so, whatever you do, he doesn’t know you anyway. So, just show whatever you want to do. Just say what you want to say.” (P3);

“Normally, I tend to like go to a game and try to experience what I want it to experience from it.” (P7);

“I love to play yourself. You know, show yourself. Because you kept communicating with other people so much.” (P9 on WoW).

### **Being in charge**

To be in charge of their gameplay allows players the opportunity to express themselves in games the way they want. Being in charge allows players to experience gameplay where they could enjoy and have the freedom that comes from making meaningful choices when they play. They want games where they can have a hand in how their gameplay could turn out. Players want to take charge of their gameplay as much as the game allows them to. Although the games’ narratives are designed to manipulate players to play in a particular direction, players still want to be able to make their choices. By being in charge of their gameplay, they could meaningfully express themselves, thus making their gameplay experience uniquely their own. They could “do my own thing” (P10) such as determine their own pace, customise their characters or avatars, set their personal objectives and so on within the game environment.

Below are excerpts for the subcategory 'being in charge':

"I feel like Mass Effect's got a lot more story and because..coz you are the player and you get to make the decision more than you do in HALO." (P5 on Mass Effect 1-3);

"...because it means I can sort of be my own person. I can um, the game kind of gives me a framework for doing whatever I want to do in it." (P10 on Eve Online);

"For me it's more relaxed game. Just go play, finish when you want." (P11 on Bubble Shooter).

### **Role-play**

Role-play allows players to express themselves in the game where they cannot do otherwise in the real world. When they role-play, players get a sense of freedom to explore and push the limits of what their in-game character can or cannot do. In games, players can customise how their character would look, and the abilities and skills that they want their characters to have, according to their needs within the confines of the game rules. In game genres such as strategy games, there are no characters that players can directly manipulate and role play. However, players are still able to express themselves through the actions and strategies which they undertake in their gameplay, playing as a god-like character. If the chosen game could fulfil players' expectations to role play, they would want to re-engage with the game again.

Below are excerpts for the subcategory 'role-play':

"Ah, I can't see the real people but you can feel like uh, you are the king of the civilization, ah, that's, that's it." (P1 on Sid Meier's Civilization 5);

"I don't know, maybe I used to play strategy games when I was a kid. Maybe that's why, I used to think that I am this commander, I am taking over the thing, oh, I love doing things like that." (P6);

"or I think about it more as trying to be that character, a bit more role play-ish." (P8 on Tomb Raider);

"That's an amazing place to play PvP because wherever you go, you're going someone, doing something." (P9 on WoW).

### **5.4.5 Showcase for Achievements**

The other aspect of the fulfilment of players' expectations in their chosen game is that players expect to be able to showcase their in-game achievements. Similar to the self-expression aspect, players evaluate their experience with the chosen games on whether the games can help them accomplish what they wanted to do when they play.

Players employed their strategic thinking skills to express their wants or needs to achieve both of the game objectives and their own as well. Also, players wanted to showcase how competitive they could be by overcoming challenges and winning missions. They could either compete with other players or beat their previous game record. They wanted games that would allow them to achieve their goals which ultimately led to a satisfying endgame. Moreover, players needed a sense of purpose in games to know what was required to achieve a satisfying playing experience. Players also wanted games that could show them that they had progressed in their gameplay compared to when they started the game. I will describe further on each of these subcategories on players' expectations in their chosen games below.

### **Strategic thinking**

Players thought strategically in games so that they would be able to achieve their in-game goals successfully. They challenge themselves to come up with strategies to achieve their objectives in ways that please themselves. Even though there could be easier ways to achieve the in-game objectives, they consider strategic approaches to carry out the actions or tasks needed in the game. Should their strategies work out, they would then give themselves a pat on the back for a job well executed. Furthermore, players want to showcase their ability carrying out well-thought strategies not only to themselves but other people as well. With a good strategy (or strategies) in hand, players can plan their gameplay for the short and long haul of the game. They would also be able to self-reflect on whether they would be satisfied with their strategies that would subsequently prove to be beneficial for their gameplay. If players could achieve what they wanted in the game, they would continue to play the game that would fulfil this expectation of theirs.

Below are excerpts for the subcategory 'strategic thinking':

"Usually I never kill the boss the first time. Ah. I die for the first, the second I die again, but I learn that way. The, the how the boss work, how the, how the boss attack, his uh weakness, his strength. Ah, that's why turn-based strategy is very important in that game." (P3 on Final Fantasy X);

"So the same principle in Mass Effect where in every game, they kill someone or you know, you're actually trying to get the best possible solution so you don't lose characters that you like. And because they've actually roll over and into the sequels, uh, it makes it more of a difference." (P5 on Mass Effect 1-3);

"And I play a mode where after each turn, it saves your game. So you can't just load an old save if you've made a bad decision. So it's really a, a very high stakes, very long game where you have to think really strategically." (P8 on XCOM: Enemy Unknown);

“When I put the bubble in that way, I get more bubbles at the same time. So, it's the, yeah, it's not, I don't like to go to the safe options. Only 3 together, I just shoot them and they're all gone. I like it to build a bigger, bigger bubbles. Okay? And then shoot them one time. So now I have more strategies with the levels that I get.” (P11 on Bubble Shooter).

### **Competitiveness in challenges**

Players are competitive with themselves and with other players when they play. Being competitive with themselves here means that players want to improve their game score from previous gameplay. Conversely, players are competitive when they play with others that they “like to beat other people” (P6) to get ahead in the game. Competitive players want to get ahead so that they can ultimately win the game. They view games as a platform where they can show off their skills and abilities to compete with other players. Competitiveness in players' showcase of achievements is closely linked to their need to think strategically in which their well thought out strategy is rewarded by winning in the game. Moreover, competitiveness with other players helped players create and strengthen their relationships over games so that they could have a sense of belonging in groups, guilds, societies and so on.

Below are excerpts for the subcategory ‘competitiveness in challenges’:

“That you can actually, wonder how they made the tricks, (...) this boy, you can actually, I can remember on my matriculation, I, I've escaped class for a week straight because I just want to learn the timing trick.” (P1 on DotA 2);

“I, I like to play with characters like that. I would like to beat other people in CC (Cyber Cafe), and say I play with the tough the thing, not like I'm on all the time.” (P6 on StarCraft);

“You fight with humans, that makes it better when you win. (...) And uh, there was also this spirit of competition of me becoming better than some of my friends.” (P9 on DotA);

### **Need for accomplishment**

In their chosen game, players want to prove to themselves that they can overcome the challenges and obstacles faced in the game. They set out their own in-game goals and then set out to accomplish these goals. They even challenge themselves to achieve better and improve their gameplay so that they come out on top, for themselves and over other players. Their need for accomplishment in the game is associated with them being competitive and taking charge of their gameplay. Players want to accomplish the tasks given in the game for their own satisfaction and not because other players or the game

itself told them to achieve.

Below are excerpts for the subcategory ‘need for accomplishment’:

“So you do different, yeah you’re the farmer leaders, so you must make sure you have enough production.” (P4 on Rival Kingdom);

“Like if I finish the level I might play at that level again just to get those points.” (P6 on Splinter Cell);

“That kind of being able to customise and realising that if you take certain perks, you won’t be able to take over perks maybe until you level up more” (P10 on Fallout series);

“And, you build on your previous uh, scores. So you, get the things with you as you go as you like.” (P11 on Bubble Shooter).

### **Sense of purpose**

When players play games, they need a justifiable reason to play that is worth their time and effort. They want games that can provide them with the means to achieve what they have set out to progress towards in the game. Players want to have objectives or missions so that they have a sense of what is needed to be accomplished in games. These objectives or missions could either be game-given or self-made ones where players would not have to play blindly as one player put it “there must be a purpose” (P4). Having a sense of purpose in games through the objectives or missions, players then know what to achieve in their gameplay and how to go about it. Players could then concentrate their time and effort to be proficient in games where they would be able to achieve what they wanted in games.

Below are excerpts for the subcategory ‘sense of purpose’:

“There must be a mission, definitely for that game. I don’t, I don’t play just to shoot, attack people, attack people. (...) There must be something either that uh, you must beat some monster or that uh you must reach a certain milestone in your defense, or you must beat somebody or, something. That type. Yeah. There must be a purpose.” (P4);

“I’m not a fan of open world games where they don’t have some sort of directions. So Metal Gear Solid is an open world game but it’s you’re infiltrating bases or trying to stop tanks from advancing or something like that.” (P8 on Metal Gear Solid V);

“But the same time, that means it’s something I can just go into and when I want to build something.” (P10 on Cities: Skylines);

“I just want to keep my mind busy. So I don't want to, get away so just pull my iPad and start play the game until we arrived airport. 1 hour and a half. Just play the game. I couldn't look and open things because I felt that time very.. (Amelia: claustrophobic). That's the right word. So this is why I keep myself busy from thinking bad things.” (P11 on Bubble Shooter).

### **Progression in gameplay**

In their chosen game, players want an indication that they have progressed well in their gameplay. They want to know if their gameplay has improved concerning the skills and abilities they have acquired, reaching their objectives and advancing further from earlier gameplay. As players progress further in their chosen game, they get to unlock specific abilities and skills which they could use to their advantage, especially in the more challenging parts of the game. Although not all games offer players the ability to acquire new abilities and skills, players feel that they did progress in the game when they achieved their objectives, moving to a new area or level, and even learning from an earlier misstep. Players want games that can showcase their progress as a recognition for their achievements. Below, I will describe further on players' expectations of showcasing through their progression of skills and abilities and their sense of progression in their chosen games.

#### (a) Progression in abilities and skills

In their chosen game, players expect to be able to progress when they play. They hope that they would have new abilities and skills whenever they have achieved the objectives. These progressions of abilities and skills are regarded as rewards that players expect to receive for their effort in the game. During gameplay, players will get to the point in the game where they can choose which ability or skills that they want to unlock. When they have acquired newer abilities and skills, players can progress further into the games, aiming to achieve more objectives and overcoming more challenges coming their way. Being able to progress with newer abilities and skills helped to reaffirm players that their gameplay had improved from their previous one. Moreover, with the newly acquired abilities and skills, players get to show other players as well as themselves that they have improved their gaming skills to be where they are in the game.

Below are excerpts for the subcategory 'progression in skills and abilities':

“So, you start off with a few men and in the end you end up with like a company of soldiers.” (P5 on Company of Heroes);

“And if you're, and if you're playing very well, then your soldiers are going to get

trained up and get better and you're gonna get more of them" (P8 on XCOM: Enemy Unknown);

"Even Call of Duty 4 has like levelling up and unlocking guns. Um, and I just, I don't know that really speaks to me as a person. I really like to be able to do that." (P10 on Call of Duty 4).

"So, I guess in EVE, I just really like working towards being able to...so, there's sort of skill system which you, when you unlock skills, you kind of unlock new ships and new parts of the ship." (P10 on Eve Online);

(b) Sense of progression

Another of the players' showcase for their achievement include being able to have a sense of progress when they play. They need an indication of their progress so that they could have feedback from their gameplay on whether they were getting nearer or farther from their goal. When players were able to progress in games with better or upgraded skills and abilities such as weapons, spells and so on, this meant that players had indeed achieved a higher standing than before. Players then knew that they had progressed in the game, going forward with their gameplay, instead of regression of their progress. Those players who were able to progress became better players than before as they had more experience, knowing better now what to do to achieve what they wanted to in the game and how. Progression in games in this context meant players were able to "unlock new abilities" (P3), explore new areas, better weapons to upgrade, improve their characters' appearances, better skills to kill, hunt, pickpocket and so on, more items to be available for use and much more.

Below are excerpts for the subcategory 'sense of progression':

"And then you get a, their abilities and combine that abilities with that jump, that, with that jump, jump and their abilities to reach a new height or maybe go through a gap. There's a lot of abilities. Uh, means uh, once you unlock that abilities, you unlock a new area." (P3 on Guacamelee!);

"Role playing game, um, I like the, is, I think it's still similar is that as you play along, you get stronger. You collect more of the items, as you make yourself stronger. You can beat uh some monster or whatever. That, that sense of achievement that you can become more and more powerful, I think that attracts me back to the game." (P4);

"Or, it's more of a over time you get more options on what you can do be made available to you. So at the start when you have limited options, you kind of have to do what is available to you and think on the fly. Where as at the end of the game, where you have lots of options of what you can do...it gets more into you just do the plan, you

implement the plan, it's succeeds or fails. Rather than having to plan on the fly and stuff like that.” (P8 on XCOM: Enemy Unknown);

“and, that’s the sort of more of a story progression there in that you kind of unlock, you end up doing stuff here and you get access to the next level, and you do stuff here then you get access to the next level. So, it’s more of physical progression rather than a character progression.” (P10 on Beneath a Steel Sky).

## 5.5 Discussion

### 5.5.1 Identity Formation and Players' Expectations studies

The identity formation study is about players making meaningful choices when they play games. On the other hand, the players' expectations study is about what players expect their chosen games would fulfil regarding their ability to express and showcase their in-game achievements. Therefore, these meaningful choices and players' expectations theories are two different theories in the sense that they are distinct theories that study the different context and perspectives of players' experiences. While these theories are different, they do relate to each other in terms of how they transition from one to another.

In the players' expectations theory, players expected to express themselves the way they wanted and show their achievements when they play in their chosen games. These expressions and achievements' expectations are what players would expect their chosen games to fulfil when they play the games. These expectations can be seen in the meaningful choices theory, namely in the character, goal, gameplay and completion aspects (See Figure 3.5 on page 59). To start, players' expectation to role play can be fulfilled when they can make meaningful choices when they form their characters. They can choose how they wanted to role play by forming a self-representation of themselves or accepting a game-made character.

Additionally, players' expectations to be competitive in challenges can be met in their chosen games when they can strategise their play to win, keeping their characters alive and be competitive to stay ahead in their game. Players' expectations in having a sense of purpose in their chosen games can be fulfilled when players can make their meaningful choices in making their objectives and accepting the game-given missions to continue playing the game. Although there was no hard data to prove that these are what players would experience from choosing their favourite games to making their meaningful choices, these connections are presumed to have occurred between the two theories. We can not, however, simply embed the meaningful choices theory in the fulfilment of players'

expectations theory. Grounded theory is meant to be a descriptive theory rather than a generalisation theory. Grounded theorists cautioned against trying to fit one theory into another (Corbin & Strauss, 2008) and recommended that researchers should allow the theory to emerge naturally (Bryant & Charmaz, 2007).

### 5.5.2 Comparison with studies on players' motivation in games

There are many studies on why players play digital games in general such as Yee (2006), Bartle (1996), De Grove, Cauberghe and Van Looy (2014), Hamari and Keronen (2017), but little to none on how players choose a specific game to play and how the chosen games eventually become their favourite one to play. Favourite games are used as the focal point in the players' expectations study because players have a meaningful experience playing the game as found in the identity formation study. When players talk about their favourite games, they can hold a long conversation about their favourite games when compared to less favourable games. From these conversations with players, we have gained further insights on how players' game choice have any bearing on their projective identity through the fulfilment of their expectations in their chosen game.

In literature, Bartle (1996) studied multi-user dungeon (MUD) players, in particular, what they like about the game. He discovered there were four player types which are the achievers, explorers, socialisers and killers. However, these different player types point to players' motivations in what they wanted to achieve in the game, rather than how and why these MUD players chose to play the specific MUD game. Another prominent research on players motivation is Yee (2006) who focussed on MMORPG players in games like EverQuest, Dark Age of Camelot, Ultima Online, and Star Wars Galaxies. In his studies, he found that MMORPG players were motivated in three main areas: achievement, socialisation and immersion. Just as with Bartle, Yee's studies did not consider how and why these MMORPG players chose these particular games to play in the first place.

In the self-determination theory (SDT), Ryan and Deci (2000) believed that individuals were motivated to fulfil their three psychological needs which are competence, autonomy and relatedness. These three intrinsic needs were then applied to games where Rigby and Ryan (2011) studied how players' needs were satisfied when they play. Tamborini et al. (2010) extends the SDT to include players' enjoyment as another need for players to satisfy when they play games. While the SDT holds for players' motivations during gameplay, the theory is too broad to be used for every game that players play, as the theory did not take into account whether players choose to play the game or whether the players were fond of the games that they are playing. Moreover, Rigby and Ryan

(2011)'s work was more focused on players' motivation in a specific game genre instead of players' motivation having any effect on their choice of games.

De Grove et al. (2014) conducted in-depth interviews with players to investigate why they played digital games. In their research, they found 12 factors on why players played digital games. However, like other researchers, De Grove et al. (2014) research also fell short in discovering why players chose a specific game to play. Gee, in his notable work on projective identity (Gee, 2003a, 2005b) has been the catalyst for this thesis on players' forming their projective identity. Nevertheless, Gee did not mention how he selected those games which he drew his experiences from when he analysed his notion of projective identity. The author had only defined and explained how he formed his projective identity in various game genres that he played. Should he have written how he chose those particular games to play and analyse, the body of literature would have greatly benefitted with players' motivations in playing a particular game.

Thus, this study was aimed to understand players' choice of games, specifically looking into how players chose a specific game to play and how the chosen game eventually become their favourite one to play. Fulfilment of players' expectations, the overarching theme in the grounded theory emerged as key in how players' chosen games would become their favourite one. There are five significant aspects in the grounded theory that shows how players choose which game to play in based on their motivations. These aspects, motivation of play, the context of a play, personal sensibility, self-direction of expression and showcase for achievements described how players' chosen games would fulfil players' expectations that would then become their favourite ones to play.

Firstly, the players' expectations study resulted with why players were motivated to play a specific game rather than games in general. Their motivations to play drove them to expect that the chosen game to fulfil their expectations of what they could get out of the game through their ability to express and achieve in the game. However, the expectations of what players wanted in the chosen game were determined by the context of play and their sensibilities. When players could experience all of these five aspects in their chosen game, they could declare that the chosen game was a favourite one to play. As a result, players could then make their meaningful choices when they formed their projective identity in the game as was found in the identity formation study. Having said that, if players' expectations were not fulfilled in the chosen game, they could continue playing the game even though the game did not end up being their favourite.

Many researchers have contributed to the body of knowledge about players' motivations in playing games. However, there is little to none about how players choose a specific game to play that would eventually become their favourite one. Motivation in

games studies did not examine players' choice of games and how their game choice have any effect on them forming their in-game identity, much less their projective identity. The two aspects of the players' expectations study, the context of play and players' sensibilities have a significant effect on whether players will choose a game that could help fulfil their expectations in their chosen game. In a lot of researches, players are motivated to play games where they could do many things in the game, socialise with other players and also an environment where they could enjoy themselves when engaging with the game. Although they have the motivation to play in a particular game, players might not be able to commit their time to play the game (context of play) or perhaps their sensibilities (personal sensibilities) hinder them from choosing the game when the game does not reflect the sensibilities that players seek.

When players play in their chosen game, they expect to be able to express themselves and achieve for themselves. This fulfilment of players' expectations was an ongoing process throughout their gameplay, not just in retrospect when players were being asked on their experience with their chosen game. Moreover, fulfilment of players' expectations can occur during gameplay, and not necessarily after gameplay when players reflect on their playing experience. Players then would return to the game, be it right after or at a later time where they know that their expectations from their chosen games can be fulfilled to make their experience a memorable one. In their study on developing players' mentality in games, Kallio, Mäyrä and Kaipainen (2011) found that players' living environment and the situation in their real-life, among other conditions, could form their mindset in how they treated and played games. These external factors correspond to the players' expectations study's context of the play in that players' real-life situations can affect players' choices of games.

In this players' expectations study, the resultant theory of the fulfilment of players' expectations was formed after having analysed players' experiences with their favourite games. In the case of Gee, he did not explicitly say that the games he used as examples in his work were his favourite ones. Nonetheless, he seemed to have spent much time playing them given how he had analysed each gameplay in detail in his work. It could be that the games he reviewed were his favourite ones to play, with the similar nature of his projective identity and the fulfilment of players' expectations theory. The projective identity notion stemmed from Gee's experience playing various game genres whereas in the players' expectations study, the fulfilment of players' expectations derived from players' experiences with their favourite games from different genres. Although there are similarities between both theories, Gee did not mention how and why he chose those games that he reviewed, if indeed they were his favourite ones to play in. The players'

expectations study with its resultant grounded theory provides an insight into these questions through the fulfilment of players' expectations in their chosen games.

## 5.6 Summary

The grounded theory method used in this study has provided valuable insights on how players choose a specific game to play that would eventually become their favourite ones to play. The resultant theory, fulfilment of players' expectations has contributed to the body of literature, especially through the aspects of the context of play and players' sensibilities that determined players' choice of the specific game to play. Even though there are many player motivation theories in place, they lacked what made players choose a specific game which they were motivated to play. Consequently, when players could express themselves and achieve in the chosen games, their expectations were thus fulfilled and the chosen game would then become their favourite game. Only then in their favourite games, players could form their projective identity through the meaningful choices that they made in the game.

## Chapter 6

# Conclusion and Future Work

This thesis explored whether players can form their projective identity in digital games. This work aimed to gather empirical support of Gee's concept of projective identity in games while deliberately not being constrained by the problematic notion of genre. This PhD research was carried out using qualitative methods in empirical studies of players' meaningful choices in their favourite games (Chapter 3), manifestation of their meaningful choices during the gameplay (Chapter 4), and players' choices of games (Chapter 5).

The first study, which was the identity formation study, first investigated how players formed their identity in games. The study found that players formed their projective identity through the meaningful choices that they had made when they played their favourite games. In the next study, which was the in-game choices study, investigated how players' meaningful choices were manifested in active gameplay as opposed to recounted experiences in their favourite games. Here, the study found that players' choice in the game were usually meaningful and personal to themselves as they could express their thoughts into action. The outcome from both studies suggested that players' choice of games may be a dominant choice that shaped all their meaningful choices in the game. Thus, the third study, which is the players' expectations study, sought to investigate the mechanisms that make players choose a game worthy for them to make their meaningful choices in the game. The players' expectations study found that players were motivated to play in games in which they expect their chosen games to fulfil their expectations from the game.

The three studies in this PhD thesis have provided the empirical support needed for Gee's concept of projective identity. These findings comprise theoretical contributions on how players form their projective identity by making meaningful choices in digital games. Firstly, the thesis has contributed to providing empirical support for projective identity. Specifically, players formed their projective identity through making meaningful choices

that they have made in the game, empirically supported not just in recounted experience but during active gameplay. Secondly, the thesis has found that choosing a game to play is complex, which has not been previously studied. This PhD thesis shows a theory that fits with previous player motivations to play in general but also how that theory gets tailored to focus towards playing a specific game and the formation of identity within it.

## 6.1 Answering the Research Question

The main research question in this thesis was ‘*Do players form a projective identity when they play digital games?*’ The three studies which are the identity formation study, in-game choices study and the players’ expectations study that were reported in this thesis provide the empirical support in answering this research question.

Firstly, this thesis focused on players’ projective identity in their favourite games. Using favourite games as the focal point in the studies helped to encourage players to converse and share their experiences in games that are memorable to them. Also, players’ experiences in their favourite games are instrumental in comparing whether Gee’s concept of projective identity was relevant to other players as well.

In starting to answer the research question, the identity formation study investigated how players formed their identity in their favourite games. Players were found to project their identity by making their meaningful choices when they played. They start making their meaningful choices when they form their characters and goals which they wanted to carry out in the game. These meaningful choices made are regarded as projective identity where players project their values and desires onto their character with the goals that they want to achieve (Gee, 2003a, 2008). Following players’ projective identity, their meaningful choices comprise their gameplay and how they complete the game. Although the study found meaningful choices to be essential in players forming their projective identity, there was a lack of knowledge about how these meaningful choices unfold when players play in the game.

In the next study, the in-game choices study investigated how players’ meaningful choices unfolded in their favourite games. Here, players played their favourite games, and their gaming session was recorded so that they could retrospectively think aloud about what choices they made and why they made those choices. From the study, players’ choices were indicated to be meaningful and personal as they could express their thoughts into action. This finding suggests that players’ choice of games have an impact on how they come to make those choices when they play in their favourite games. Just as Gee (2005b) who could form his projective identity in games that he likes and choose to play, players could also form their projective identity, specifically by making meaningful choices

when they play. Whereas Gee formulated his theory regarding players' development in games, the in-game choices study shows that players' development takes place over a set of choices which have to be framed as meaningful.

From the two studies, players' choice of games has significance in how players can form their projective identity. With that being the case, the players' expectations study was tasked to investigate how did players choose a game that would eventually become their favourite. The findings from the study showed that players are motivated to play in games that can fulfil their expectations of self-expression and achievement in the chosen game. However, how they choose the game to play is determined by the context of play and their sensibilities of which the game must have. Should the chosen game fulfil these aspects, the chosen game will be their favourite. In their favourite games, players would be able to form their projective identity through making meaningful choices when they play. With that, there is empirical evidence from these three studies to support Gee's theory on whether players can form their projective identity in digital games.

## 6.2 Research Contributions

The work conducted in this thesis provided in-depth insights into how players can form their projective identity in digital games. This PhD research has conducted three qualitative studies to investigate Gee's concept of projective identity, through the data gathering of players' experiences both in playing their favourite games. Together with substantial empirical evidence to support Gee's theory on projective identity, this thesis has added further knowledge on to the formation of projective identity in other players as well.

Gee based his work on projective identity analysing games that he chose and liked to play. While many researchers studied players' identity, particularly in their identification with characters and extending to specific games in what people called genres, such as Hefner et al. (2007), Klimmt et al. (2009, 2010), Gee instead chooses to analyse games from a wide range of game styles to show that players' projective identity can be relevant to many games, and not constrained to a single type of game. This PhD research follows Gee's approach in not studying games from a single type of game as many researchers have done, in part because even the notion of genre is problematic in games research (Wolf, 2001; R. I. Clarke et al., 2015). Instead, this research gathers players' experiences in playing games from different game styles for comparison with Gee's concept of projective identity.

After having analysed the data from all three studies conducted in this thesis, there are three research contributions to the body of knowledge on players' formation of projective

identity in games. These three contributions in the thesis are empirical support for Gee's concept of projective identity, empirical support for the manifestation of players' meaningful choices and empirical support for players' choice of games affecting their projective identity.

Firstly, this thesis has provided empirical support for Gee's concept of projective identity in that players can form their projective identity as to how Gee described it. This thesis expands Gee's theory on projective identity in that players project their identity through meaningful choices, which they made throughout the game. However, Gee did not explain players' choices in their gameplay and completion of the game that could form their projective identity as well. Players' meaningful choices are present from the beginning until how they complete the game. Their meaningful choices can be seen in how they form their characters (including accepting to play the game-ready character), goals, gameplay and completion of the game.

Even though Gee (2005b) has elaborated further on the projective identity through the projection of players' values unto the character, player-character expertise and their development capacity in the game, he did not mention much about the role of players' choice in their identity. What is missing from Gee's theory of projective identity is players' choice that makes their gaming experience meaningful for them. Salen and Zimmerman (2005) suggested that good game design could create a meaningful play for players, gameplay experience that players could find meaning and meaningful for them. To play a game translates to players making their choices and taking the needed actions to support a meaningful play (Salen & Zimmerman, 2005). Moreover, Gee has also only described his account of game experience and not of other players. This meaningful choices theory, while not necessarily generalisable, at least demonstrates the potential broader applicability of Gee's notion of projective identity. Thus, the projective identity lacks the essence of players' experiences, particularly their meaningful choices in forming their in-game identity. The essence of the projective identity, which is players' meaningful choices, is pivotal to players' game experience because they can then make their playing experience their own.

Secondly, the thesis provided empirical support for players' meaningful choices, not just as a recounted experience but through players' active gameplay. Instead of just looking at players' projective identity experiences from a high level, the thesis has examined players' meaningful choices, and in extension, forming their projective identity during active gameplay. With players playing games of different types (what might said to be across genres), their collective experiences resulted in the manifestation of their meaningful choices through their goals, thoughts, continuance and management in

the game. Existing studies such as Hayes (2007), Doh and Whang (2014), Rigby and Ryan (2011) only investigated players' identity in specific types of games like RPG and MMORPG. Even then, these studies, like many other player experience studies, have only investigated from a recounted experience, either through a self-reported questionnaire or an interview. Consequently, these studies have missed out on the active formation of players' identity that the in-game choices study has provided empirical support for the meaningful choices and projective identity theories across various game genres.

Before players can make their meaningful choices and thereafter form their projective identity in games, they first have to make the first choice: to choose a game to play. Many studies have examined players' motivations in games of particular genres, for example, the highly cited Yee (2005)'s study on MMORPG players and Bartle (1996)'s study on MUD players and their preferences in the game. However, there was limited to none research on players' choice of games that could affect their formation of identity in games. As the choice of game is essential to players' ability to form their projective identity, this thesis has found empirical support for players' choice of games in regards to their projective identity. Even though the body of literature has no lack of studying players' motivation in games in specific genres such as Yee (2006) for MMORPG, Lafrenière, Verner-Filion and Vallerand (2012) for various game genres, and Kahn et al. (2015) for MOBA and MMOG, there has not been any studies on how players choose a specific game to play as choosing the game is complex. Therefore, this PhD research specifically studied how players choose a specific game to play and how that chosen game would eventually become their favourite one to play. This thesis reported on players' motivations to play specific games that are expected to fulfil their expectations to express themselves and achieve for themselves in their chosen games.

Furthermore, the thesis found that how they choose the game is determined by the context of play that the game offers and players' sensibility in the appeal of the chosen games. This thesis produced a theory that complements previous player motivations to play generally such as Yee (2005, 2006), Ryan and Deci (2000), Rigby and Ryan (2011), De Grove et al. (2014) but specifically also provides evidence on how the theory gets tailored to focus players' choice on specific games. Also, this thesis shows how players' choice of games becomes their favourite game to play. This theory on players' choice of games is vital in understanding players' projective identity in digital games.

### **6.3 Limitations and Future Work**

Even though this PhD research has conducted studies to provide evidence for how players' form their projective identity in digital games, the nature of the main research question

limits the research approach needed for the thesis. The thesis employs a qualitative approach in its studies as the research question seeks to explore how players can form their projective identity. The studies used interviews in order to gather self-reports necessary to understand players' experiences of identity but this is supported also with observations to see how those accounts relate to actual gameplay. Thus, this PhD report has relied on players' self-report and not just based on observation of players' experiences with games. If the data gathered are only from observing players' experiences with the games, there would only be a one-sided account, which is from my account. If that is the case, this thesis will not be much different from Gee's research. Therefore, this thesis managed its limitation of players' self-report using different data collection used in the three studies, which are grounded theory in both of the meaningful choices and players' expectations studies and cued-retrospective think aloud or post-game player commentaries in the in-game choices study.

In the grounded theory studies, the data collection was based on theoretical sampling because I wanted to investigate players' experiences in their favourite games from various genres. As mentioned earlier, Gee formed the theory of projective identity based on his experience playing games and not of other players. Hence, the data collected for the grounded theory studies are to ensure whether players form Gee's concept of projective identity or something else altogether. Additionally, due to the interview method in the grounded theory, participants might have possibly recounted selected memories, if not all, when sharing their experiences with their favourite games. In the in-game choices study, the limitation of the thesis was managed via opportunity sampling. In the study, I have used the post-game player commentaries as a way for players to think aloud using their gameplay as cues retrospectively. Through this data collection method, I have wanted to investigate how players' meaningful choices are unfolded during their gameplay instead from a recounted experience. This method was used to overcome the limitation in the meaningful choices and players' expectations studies so that the data collected in the in-game choices study is as precise with players' explanation on their in-game choices.

The studying of players' identity is a complicated process that it would, eventually, necessitate a suitable sample size to substantiate the resultant theory. In this thesis, a small sample size of participants is used across all three studies as compared to quantitative research. Both of the meaningful choices and players' expectations studies that employed grounded theory for its data collection have recruited only nine and 11 participants. Even though the sample size for the studies is small, per grounded theory, once the theory is saturated, the data collection was stopped. The theory saturated early could be due to the feature of grounded theory in the constrained domain of

players playing games. The grounded theory used in players' experiences is different from the social science context where the researchers studied the highly varied social phenomenon due to the complexity of the social world. On the other hand, the game designers constructed the game world and that the players engage the game on the game's terms. Few players play the game not as how the designers intended it, and that the game world constrained the possibility of players' actions, consequently their engagement with the game world. The grounded theory in this thesis saturated quickly because there is a limitation of the profoundly different ways of players engaging with the games.

This PhD research has also not conducted inter-coder reliability in all three studies that use grounded theory and thematic analysis for its analysis. In the meaningful choices and players' expectations studies that used grounded theory, there was no inter-coder reliability being carried out because the grounded theory is about how the researcher interprets the data and that interpretation informs the development of the interviews (Corbin & Strauss, 2014). This interpretation of data makes grounded theory an inherently reflexive form in which inter-coder reliability cannot easily compensate for this important procedure. Instead, through the interpretation of data, the researcher relies on the external acceptance of the findings either with the participants themselves or the congruence with existing knowledge. Hence, the inter-coder reliability method might undermine the core practice of the grounded theory in coding the data. In the in-game choices study that used thematic analysis, there was no inter-coder reliability used as well. Braun and Clarke (2017) did not support the use of inter-coder reliability when thematically analysing the data. They believed that there was no singular way to code the data and consequently, the codes would bear the markings of the researchers who were involved in the coding process instead.

With that being said, the findings from this PhD research have provided sufficient evidence to answer the research question regarding players' projective identity in games. Given the limitations in the thesis, we should not rule out that players do explore games that push the boundaries of projective identity. Nonetheless, there are more opportunities to further research on Gee's concept of projective identity. As the thesis involved players of the legal age, there is little known about children's projective identity, much less about their meaningful choices in games. The number of child players is on the rise in recent years, as they have access to smartphones and tablets (GameTrack (ISFE/Ipsos Connect), 2018). The growing number of child players makes studying their identity vital seeing that there will be many opportunities for them in years to come to create and enact out their identity in the game. Compton-Lilly (2007) did discuss children's experiences in games for literacy using Gee's concept of projective identity. However, her

analysis was based on the sole experience of her young daughter (at the time) and Gee's learning principles in games. Moreover, child players and adult players have different priorities in life, which potentially could affect how different child players would come to choose their favourite game to play. There is a lack of knowledge in whether children could form the same projective identity as adults through their meaningful choices.

The findings from this report also offer the opportunity for exploring projective identity in serious games. Serious games are different from *off-the-shelf* digital and physical copies of games. Serious games are designed for a serious purpose such as education, healthcare and marketing as opposed to games that are typically designed for entertainment (Jupit, Minoi, Arnab & Yeo, 2011). With serious games becoming increasingly popular particularly in education, there have been many interests to study players' identity in serious games. There have been projective identity studies done on players in serious games like Foster and Shah (2016). However, the authors did not discuss much how players could form their projective identity; instead they focussed on players learning through projective reflection. In his book *What Video Games Have to Teach us About Learning and Literacy*, Gee (2003a) did use video games as examples for how individuals can learn from games but not from serious games. Therefore, there is an opportunity to research on players forming their projective identity and their choices in serious games as well.

Another possible future research stemmed from this thesis is investigating into how players' projective identity can hold over time. Identity scholars like E. H. Erikson (1959/1994a), McLean and Pasupathi (2012) suggest that individuals' formation of identity is ever changing and that they continually reconstruct their selves via reconstruction of their past. This change of identity would suggest that players' projective identity may change over time during their gaming experience. If indeed their projective identity changes, how will the change affect their projective identity in games? This thesis reported that players' projective identity occurs in a particular game, specifically their favourite game. Would it be reasonable to expect their projective identity to change? Moreover, if that is the case, could a game become less favourable and hence their projective identity diminishes? Hence, studying the possibility of changes in players' projective identity would be worth to investigate.

## 6.4 Concluding Remarks

This thesis provides the empirical support needed for how players can form their projective identity in games. This PhD thesis contributes to the body of knowledge regarding players' projective identity and the importance of their choice of games. This

thesis also makes way for further research into players' projective identity among children and serious games. Furthermore, there is a research opportunity to investigate if players' projective identity is steadfast or temporary in their favourite game.



## Appendix A

# Informed Consent for Gaming Experience Study

The purpose of this form is to tell you about the study and highlight features of your participation in the study.

### **1 Who is running this?**

The study is being run by Amelia Jupit who is a PhD student in the Department of Computer Science at the University of York.

### **2 What is the purpose of the study?**

The study aims to investigate the experience of people playing with computer and/or video games.

### **3 What will I have to do?**

You will be asked some demographic questions about yourself and your usual game playing habits. We will also ask you on how you play the computer/video games and the characters that you play in the games. The interview questions are relatively straightforward but if you are unsure how to answer any part you may ask the experimenter or ask to skip the question.

### **4 Who will see this data?**

Amelia will see this data and Dr Paul Cairns, who is a Reader in the department and her supervisor is overseeing her to analyse the data. Amelia will compile the data from all participants into a large spreadsheet that will be used for further study. However, once it has been compiled, it will be completely anonymised and you will not be able to

## APPENDIX A. INFORMED CONSENT FOR GAMING EXPERIENCE STUDY

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be identified with your data. The experiment may be published in an academic journal but the data will only be presented in summary form and you will not be directly identifiable in any way.

### **5 Do I have to do this?**

Your participation is completely voluntary. You can therefore withdraw from the study at any point and if requested your data can be destroyed.

### **6 Can I ask a question?**

Do ask either Amelia or Paul any questions you may have about the procedure that you are about to follow. If you have any questions about the purpose or background of the interview, please wait until the end of the interview and you will have an opportunity to ask Amelia your questions.

### **7 Consent**

Please sign below that you agree to take part in the study under the conditions laid out above.

This will indicate that you have read and understood the above and that we will be obliged to treat your data as described.

**Name:**

**Signature:**

**Date:**

## Appendix B

# Demographic Questionnaire

Please fill out the questions below to the best of your knowledge (at the time of study).

1. Age: \_\_\_\_\_ years old
2. Gender: \_\_\_\_\_
3. What is your occupation?
  - (a) University Staff
  - (b) Student
  - (c) Other: \_\_\_\_\_
4. Have you played computer or video games before?
  - (a) Yes (if yes, go to Question 5)
  - (b) No (if no, end of questionnaire)
5. How long have you played computer/video games? \_\_\_\_\_ years
6. What are your favourite computer/video games that you play?

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7. What are your least favourite computer / video games that you have played?

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**-End of questionnaire-**



## Appendix C

# Initial Interview Questions for Identity Formation Study

### Section A: General

1. Do you play any computer games?
2. How long have you played them? How often do you play them?
3. What type of games do you usually play?  
(If playing a game with pre-defined character, proceed to Section B. If not, proceed to Section C, If game has no clear playable character, proceed to Section D ? after finishing questions in Section A)
4. What is your favourite game of all time?
5. What attracts you to (the game)? / Why do you play the game?
6. How did you find out about (the game)?
7. What was the game all about?
8. How do you play the game?
9. Did you complete the game? Why (or why not)?  
(If yes, proceed to Question 10. If No, proceed to Question 11)
10. Was it necessary to play it until the end?
11. Have you ever start over playing (the game)? Why (or why not)?
12. What were you doing just before or right after the game?

APPENDIX C. INITIAL INTERVIEW QUESTIONS FOR IDENTITY FORMATION STUDY

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13. (a) Do you think about (the game) during work, at home or outside the office/lab?  
(b) What were your thoughts (if you don't mind me asking)?
14. In games, we have avatars and characters.
  - (a) What is a game avatar?
  - (b) How about a game character?
  - (c) Does the game have a playable avatar/character?

**-End of Section A-**

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## Section B: Pre-designed Avatar/Character

15. What was the character's name that you played in \*name-of-the-game\*?
16. Can you tell me more about character?
17. Is there any personality traits of \*character\* that you like or dislike?
18. (a) What was your first impression of \*character\* when you just started playing \*name-of-game\*?  
(b) How about at the end of your game play?
19. How do you interact with your avatar/character? / How do you control your avatar/character?
20. (a) Do you think your character has developed throughout the game play?  
(b) How?  
(c) Does it affect your style of play?
21. (a) Was there a goal in game?  
(b) Did you set your own goals?  
(c) How?
22. If your character is a female (male) instead of male (female) (or a different ethnic (game world) background), will it have any impact on how you play the game? How so?
23. (a) What are the skills that you acquire when playing as \*character\*?  
(b) Do you reckon that these skills have any use in the real world?
24. Do you like playing \*avatar/character\*?
25. Have you ever compared your game play with a friend's?
26. How is playing \*name-of-game\* when compare to playing, say Angry Birds / Cut the Rope / Solitaire / Tetris /Ludo?
27. If there is one thing that you can change about your avatar/character in the game, what will that be? Why?

**-End of Section B-**

**Section C: Avatar / Character Design**

28. (a) What was your character's name?  
(b) How did you design \*character-name\*?
29. Why did you choose \*such-attributes\* for \*character-name\*'s design?
30. Where did you get your inspiration from (regarding the design)?
31. Does \*character-name\*'s appearance influence your game play?
32. Can you tell me more about \*character-name\*?
33. Did you have any expectation as \*character-name\* in the beginning of the game?
34. What was it like to play as \*name-of-avatar/character\* in \*name-of-game\*?
35. Have you tried playing as a different avatar/character?  
(If yes, proceed to Question 36. If no, proceed to Question 37)
36. What was it like having played the different avatars/characters? (proceed to Question 37)
37. How do you interact with the avatar/character? / How do you control your avatar/character?
38. (a) Was there a goal in game?  
(b) Did you set your own goal(s)?  
(c) How?
39. (a) What are the skills that you acquire when playing as \*character-name\*?  
(b) Do you reckon that these skills have any use in the real world?
40. Do you like playing \*avatar/character\*?
41. Have you ever compared your game play with a friend's?
42. How is playing \*name-of-game\* when compare to playing, say Angry Birds / Cut the Rope / Solitaire / Tetris / Ludo?
43. If there is one thing that you can change about your avatar/character in the game, what will that be? Why?

**-End of Section C-**

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**Section D: No Avatar/Character (Chess/Tetris/etc)**

44. What is the goal of \*name-of-game\*?
45. How did you play \*name-of-game\*? / Do you have a style in playing \*name-of-game\*?
46. Why do you play \*name-of-game\*? For scores or keep the game going?
47. Why did you play that way?
48. What do you need to do in order to win the game?
49. How do you describe yourself when playing \*name-of-game\*?
50. How do you rate yourself in playing \*name-of-game\*?
51. (a) Have you played any role-playing, strategy or action game (rpg-s-ac-game)?  
(b) (if yes) How is playing \*rpg-s-ac-game\* different from playing \*name-of-game\*?  
(if no) Why not?

**-End of Section D-**

APPENDIX C. INITIAL INTERVIEW QUESTIONS FOR IDENTITY FORMATION STUDY

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**Section E: Closing**

52. If you could change one thing (or several things) in the game, what is it? Why is that?
53. Just for demographic purposes, could you tell me your age?
54. Where are you from?

**-End of Section E-**

Thank you for spending time to answer my questions.  
End of Interview

## Appendix D

# Final Revision of Interview Questions for Identity Formation Study

1. How long have you been playing games?
2. What is your most memorable game that you have played?
3. What is it about title of game that attracts you so well?
4. How did you get to know of this game?
5. When you start playing the game, how do you know what to do when you first got it?
6. Do you see any game character while you are in the game (title of game)?
7. Is there a character given to you or you can choose from several other characters?
8. The character that you chose, what criteria that you feel incline to choose that particular character?
9. When you stop playing and go back to it, do you pick up where you left off or start all over again?
10. When you play at a different time, does your style of playing the same with (other people(or you have your own different style?
11. How well do you usually play in the game?
12. In (title of game), what do you like so much about the game?

APPENDIX D. FINAL REVISION OF INTERVIEW QUESTIONS FOR IDENTITY  
FORMATION STUDY

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13. How do you win each level?
14. Can you still complete the level without having to get (whatever tasks)?
15. When the game offers you the next character to play, who do you go for?
16. Have you played as other character?
17. Do you like any particular character?
18. How long does it take you to play in one sitting?
19. Is there only one way to complete the levels in the game?
20. When you finish with one level, what do you feel when you are done with the level?

## Appendix E

# Informed Consent for Gaming Experience Study

The purpose of this form is to tell you about the study and highlight features of your participation in the study.

### **1 Who is running this?**

The study is being run by Amelia Jupit who is a PhD student in the Department of Computer Science at the University of York.

### **2 What is the purpose of the study?**

The study aims to investigate the experience of people playing with computer games.

### **3 What will I have to do?**

Firstly, you will be asked to fill in some demographic questions about yourself. You will then be asked to play your computer game for 20 minutes. After the game, you will be asked on the actions and choices you made and the overall experience in the game. The interview questions are relatively straightforward but if you are unsure how to answer any part you may ask the experimenter or ask to skip the question.

### **4 Who will see this data?**

Amelia will see this data and Dr Paul Cairns, who is a Reader in the department and her supervisor is overseeing her to analyse the data. Amelia will compile the data from all participants into a large spreadsheet that will be used for further study. However, once it has been compiled, it will be completely anonymised and you will not be able to be identified with your data. The experiment may be published in an academic journal

## APPENDIX E. INFORMED CONSENT FOR GAMING EXPERIENCE STUDY

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but the data will only be presented in summary form and you will not be directly identifiable in any way.

### **5 Do I have to do this?**

Your participation is completely voluntary. You can therefore withdraw from the study at any point and if requested your data can be destroyed.

### **6 Can I ask a question?**

Do ask either Amelia or Paul any questions you may have about the procedure that you are about to follow. If you have any questions about the purpose or background of the interview, please wait until the end of the interview and you will have an opportunity to ask Amelia your questions.

### **7 Consent**

Please sign below that you agree to take part in the study under the conditions laid out above.

This will indicate that you have read and understood the above and that we will be obliged to treat your data as described.

**Name:**

**Signature:**

**Date:**

## Appendix F

# In-Game Choices Study: Script

Before they start to play the game, inform them of the following:

1. participants are not pressured into performing when playing the game
2. participants' performance did not matter in the study
3. participants could stop playing the game and not be forced to continue playing longer than they usually did
4. participants could play for as long as they like beyond the 20 minutes required
5. their gameplay will be recorded and used as cued material for the post-game commentary session
6. the commentary session will be recorded for data analysis purpose
7. participants are encouraged to control the playback, to pause and play to their comfort



## Appendix G

# Questions for In-Game Choices Study

1. Have you tried just using the default character? Why?
2. What made you choose this character over the others?
3. What went through your mind at this point?
4. Do you think that you would do it differently the next time around? Why?
5. Why did you choose the \*sword / bow / rifle / weapon over the others?
6. Why did you play it in that perspective (first-person vs third-person)?
7. Did you plan ahead what you want to do or just decide on the spot?
8. What is it that you were doing there?
9. Why did you do this rather than doing that?
10. Was what you did there important to you?
11. Why do you need to kill?
12. Do you always have to kill?
13. Why didn't you kill .. ?
14. Did you choose to get ... Why?
15. Why did you shoot there?
16. Why didn't you want to go ...?

## APPENDIX G. QUESTIONS FOR IN-GAME CHOICES STUDY

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17. How did you choose to get .. ?
18. Why specifically X, instead of Y or .. ?
19. Is the ... important to you?
20. How do you choose one over the other?
21. Why do you go for playing a ... ?
22. Do you always have to .... ?
23. Getting the .. are really important?
24. Why not?
25. How do you know where to go?
26. Why do you want to talk to .. ?

**-End of Questions-**

## Appendix H

# Informed Consent for Gaming Experience Study

The purpose of this form is to tell you about the study and highlight features of your participation in the study.

### **1 Who is running this?**

The study is being run by Amelia Jupit who is a PhD student in the Department of Computer Science at the University of York.

### **2 What is the purpose of the study?**

The study aims to investigate the experience of people playing with computer games.

### **3 What will I have to do?**

Firstly, you will be asked to fill in some demographic questions about yourself. Amelia will also ask you questions on your experience playing your favourite games and your preference of games. The interview questions are relatively straightforward but if you are unsure how to answer any part you may ask the Amelia or ask to skip the question.

### **4 Who will see this data?**

Amelia will see this data and Dr Paul Cairns, who is a Reader in the department and her supervisor is overseeing her to analyse the data. Amelia will compile the data from all participants into a large spreadsheet that will be used for further study. However, once it has been compiled, it will be completely anonymised and you will not be able to be identified with your data. The experiment may be published in an academic journal but the data will only be presented in summary form and you will not be directly

identifiable in any way.

### **5 Do I have to do this?**

Your participation is completely voluntary. You can therefore withdraw from the study at any point and if requested your data can be destroyed.

### **6 Can I ask a question?**

Do ask either Amelia (ajrj500@york.ac.uk or benbainv@gmail.com) or Paul (paul.cairns@york.ac.uk) any questions you may have about the procedure that you are about to follow. If you have any questions about the purpose or background of the interview, please wait until the end of the interview and you will have an opportunity to ask Amelia your questions.

### **7 Consent**

Please sign below that you agree to take part in the study under the conditions laid out above.

This will indicate that you have read and understood the above and that we will be obliged to treat your data as described.

**Name:**

**Signature:**

**Date:**

## Appendix I

# Semi-Structured Interview Questions for Players' Expectations Study

1. What did you like about this game?
2. Was there a specific game genre that you like to play?
3. Why have you chosen to play this game?
4. How did you come to know about this game?
5. What persuaded you to try out this game in the first place?
6. Have you tried playing other games in same genre before? How about different genres?
7. How do you compare playing this game compare with the other games that you have played?
8. What attracted you to this game?
9. What did you expect out of playing this game?
10. What made this game stand out than the others that you have played?
11. What brings you back to to playing the game?
12. What are the criteria of a game that would make into your favourite list?
13. What was the deciding factor or the decision point in the game when you realised that the game would be your memorable one?

APPENDIX I. SEMI-STRUCTURED INTERVIEW QUESTIONS FOR PLAYERS' EXPECTATIONS STUDY

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14. What was your favourite part of the game?
15. How did the game meet your expectations?
16. Have you read reviews of the game that influence your choice of game?
17. Has playing this game become an important aspect in your life? Why is that?
18. How do you know that you have found 'The Game' for you?
19. How do you represent yourself in the games that you chose to play?

**-End of Questions-**

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