# Pokemon Go – What is Behind the Hype?

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# **Table of Contents**

3.1 In	troduction to Methodology	
3. 1. 1	Qualitative Research	
3. 1. 2	Philosophical Assumptions	
3.2 R	esearch Methods	
3. 2. 1	Data Collection Method – In-Depth Interviews	
3. 2. 2	Data Analysis Method – Thematic Analysis	
3.3 R	esearch Design	
3. 3. 1	Preparation	
3. 3. 2	Participants	41
3. 3. 3	Data Collection	42
3. 3. 4	Data Recording – Transcriptions	43
3. 3. 5	Data Analysis	43
3.4 Is	sues of Reliability and Validity	45
Chapter 2	Four – Findings	47
4.1 In	troduction	47
4. 1. 2	Description of Pokémon Go Phenomena	47
4. 1. 3	Overview of Chapter	48
4.2 TI	heme 1 –Sense of Belonging	49
4. 2. 1	Social Influence	50
4. 2. 2	Fear of Missing Out	
4. 2. 3	Increased Social Interactions	54
4. 2. 4	Bonding with Friends/ Family	54
4. 2. 5	Pokémon Go Community	55
4.3 TI	heme 2 – Excitement	56
4. 3. 1	Game is Innovative	57
4.3.2	Adventurous	
4. 3. 3	Competitive	

4.3.	4	Imaginary
4.3.	5	Challenging
4.3.	6	Addictive
4.3.	7	Connected to the Real World
4.4	Theme	e 3 – Nostalgia6
4.4.	1	Prior Fan of Pokémon
4.4.	2	Memories of Childhood
4.5	Theme	e 4 – Flow State
4. 5.	1	Loss of Self-Consciousness
4. 6	Theme	e 5 – Killing Time60
4. 6.	1	Getting Rid of Boredom
4. 7	Theme	e 6 – Accomplishment
4.7.	1	Reward by Reaching Higher Levels
4.7.	2	Reward by Collecting Pokémon
4.8	Theme	e 7 – Stopped Playing Pokémon Go70
4. 8.	1	Social Influence
	Code 1 -	- Other People Stopped Playing:7
4. 8.	2	Game Features
	Code 2 -	- Restricted Pokémon Sightings72
	Code 3 -	- No Locating System
	Code 4 -	- Can't Change Teams74
	Code 5 -	- No Interaction with Pokémon Characters74
	Code 6 -	- Not Challenging Enough74
4. 8.	3	Technical Issues
	Code 7 -	- Server was Glitchy70
	Code 8 -	- Drains Battery and Data70
4. 8.	4	Not Worth the Effort7

	Code 9 – Work Exceeded Reward
4. 8.	5 No More Novelty
	Code 10 – Repetitive
	Code 11 – Game was Boring78
	Code 12 – Nothing New79
4. 8.	6 Other Factors79
	Code 13 – Overpromised in Trailer
	Code 14 – No Prior Affinity80
4. 9	Conclusion of Findings
Chaj	oter Five – Discussion
5.1	Introduction
5.2	Theme 1 – Sense of Belonging
5.3	Theme 2 – Excitement
5.4	Theme 3 – Nostalgia
5.5	Theme 4 – Flow State
5.6	Theme 5 – Killing Time
5.7	Theme 6 – Accomplishment90
5.8	Theme 7 – Stopped Playing91
5.9	Conclusion95
5.10	95 Implications
5. 11	Limitations of the Study
5.12	2 Directions for Future Research
Refe	rences
App	endix 1: Ethics Approval111
App	endix 2: Participant Information Sheet113
Appendix 3: Participant Consent Form	
Appendix 4: Sample Interview Transcript	

# List of Tables

Table 1: Personality Traits Relative to Virtual (Video Gaming) Behaviour	.23
Table 2: Player Motivation to Engage in Online Games	26
Table 3: Phases of Thematic Analysis	.39
Table 4: Interview Guide	42
Table 5: Profile of Research Participants	.44
Table 6: Data Extract with Codes Applied	.46
Table 7: Theme 7 – Stopped Playing	.71
Table 8: Comparison of Motivations to Stop Playing Pokémon Go vs. Motivations to Play.	95

# List of Figures

Figure 1: Google Maps Pokemon Master business cards	12
Figure 2: Pokemon Go crowds Taiwan	13
Figure 3: Overview of findings "Motivations to Play Pokémon Go"	50
Figure 4: Overview of findings "Motivations to Not Play Pokémon Go"	51
Figure 5: Theme 1 "Sense of Belonging"	52
Figure 6: Theme 2 "Excitement"	59
Figure 7: Theme 3 "Nostalgia"	65
Figure 8: Theme 6 "Accomplishment"	68

### **Attestation of Authorship**

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the reward of any other degree or diploma of a university or other institute of higher learning.

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Signature.....

31/10/2017

Date.....

# **Ethical Approval**

AUT University Ethics Committee (AUTEC) approved the ethics application for this research study on 22/02/2017 (see Appendix 1).

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XX

#### Abstract

Pokémon Go, the augmented reality mobile game phenomenon, swept the world by storm in what seemed to be overnight, as it broke app and play store download history with 10 million downloads in the first week of its release on 6<sup>th</sup> July 2016. For the next few months after its release it dominated both the online and offline world with its presence. However, this dominating presence was short lived, with a lot of players no longer playing.

The purpose of this research was to investigate what motivated people to play Pokémon Go and what sustained their original participation with the game, as well as to explore the reasons/motives that caused players to stop playing the game. This research explored the psychological constructs that determined a person's willingness to engage in the game, and also the underlying motives that kept them playing and what then caused them to stop. A qualitative research approach was used, involving in-depth interviews with 10 Pokémon Go players varying in gender and age, who identified as being engaged with the game during the hype.

The findings revealed that the motivation for engaging with Pokémon Go was fundamentally a social aspect which initiated a sense of belonging for the players relative to the hype. Players sought pleasure through game playing, as the game was exciting, and also provided players with nostalgia from their prior affinity to the Pokémon brand. A sense of achievement, a mode for killing time, and players entering a state of flow was also recorded. The findings of this research provide insight into how an online game or any other pastime may repeat a fad and exhibit a rapid fall in popularity after some time of enthusiastic participation.

This study shows that the rapid decline of Pokemon Go participation can be attributed to a deterioration in the many factors that initially caused the upsurge of enthusiasm for the game. Those factors included a loss of novelty for the game, social influence to stop playing, technical issues, game feature issues, and players feeling the game was no longer worth the effort. Other factors such as players exhibiting no prior affinity to the Pokemon brand and an overpromised game trailer also contributed to the rapid decline of player participation with the game. These findings offer both practical and theoretical implications in regards to why players stopped playing Pokémon Go, as all of the participants who were interviewed fell under this category.

### **Chapter One – Introduction**

#### 1.1 Background

A Pokemon themed map application was released by Google in conjunction with Niantic Labs and the Pokemon Company in 2014 as a workplace prank for April Fools. The joke was "Google is hiring a Pokemon Master" (Hamill, 2016). The bogus job application required participants to download the App and see how far they could get in the game by catching all the Pokemon that appeared on the map. Players could simply click on the Pokemon to catch them. Participants who completed the task were rewarded with a certificate of achievement and presented with personalized Pokemon Master business cards (see Figure 1). The prank was such a runaway success that Niantic decided to turn the concept into a commercial product.



Figure 1: Google Maps Pokemon Master business cards

(Image retrieved from Google Images with permission).

The process of making a real-world game involved collaboration from both Niantic Labs and Google who merged elements of their existing products – Google Maps and Ingress (another augmented reality mobile game) – to create Pokemon Go. The game was designed to encourage movement, face-to-face social interaction, and exploration of public spaces through innovative augmented reality technology (Niantic Labs, 2017).

Pokemon Go's architecture mapped places in the world and assigned them to relevant Pokemon habitats. For example, players who were near the water were likely to encounter water-based Pokemon. To encourage players to exercise, the game gave players a "buddy Pokemon" which evolved based on how far the player walked – the further the player walked the more candy the player would receive for his/her companion. Niantic revealed that enthusiastic players walked 4.6 billion kilometres – the equivalent distance between Earth and Pluto – to progress in the game (Niantic Labs, 2017). The social aspect of the game was encouraged through the battling system. Battling in a group of players meant that the group was more likely to win that battle. In terms of the technology, Niantic aspired to move past the traditional camera-based augmented reality aspect and create excitement by augmenting people's real lives. To Niantic, this meant moving beyond augmentation of the image displayed through the camera of a player's phone (Niantic, 2017). A Pokemon Go trailer released in 2015 portrayed the excitement Niantic were hoping to invoke for the game. The trailer showed hundreds of people assembling together to play the game, where they could see and catch Pokemon in the real world (Hamill, 2016). It did not take long after the games release for real life images to start circulating on the Internet that replicated the trailer's Pokemon Go mania (see Figure 2).



Figure 2: Pokemon Go crowds Taiwan

(Image retrieved from Google Images with permission).

Two years later, on the 6<sup>th</sup> July 2016, Pokemon Go was released to the world with tremendous success. By September 2016, the mobile gaming app had amassed more than 500 million downloads (Hamill, 2016). By September 2017, that number had decreased to 100 million (Google Play, 2017) due to players un-installing the App.

#### **1.2** Importance of Study

The sheer success of downloads Pokemon Go received after its release, breaking records of 50 million installations within two months, faster than any other game, and topping the active user time of Twitter, Facebook, Snapchat, and Tinder, with an estimated revenue value of \$200 million (WARC, 2016), is enough reason to ponder the what, how, and why of that success.

The implications of Pokemon Go's success also represents a tipping point for the strategic application of augmented reality technology, where excitement is a key objective, generating implications for marketing, advertising, and gaming researchers and practitioners.

Regardless of a forthcoming augmented reality gold rush, Pokemon Go has shown millions of people around the world that augmented reality can enrich consumer experiences beyond the utilitarian product alone if applied strategically. To date, there has been no exploratory or empirical research published on the Pokemon Go phenomenon. Therefore, this study provides the first exploratory study on the Pokemon Go phenomenon, presenting theoretical implications for augmented reality gaming, motivation, and fad research.

This research sets out to explain what, how, and why from the consumer's perspective Pokemon Go became an instant phenomenon. In doing so, motivations that drove consumers to participate in playing the game upon its New Zealand release in July 2017 are investigated. The reasons those players continued to participate with the game are explained and what happened after that is also discussed.

#### 1.3 Research Aims

- This research seeks to identify what motives drove Pokemon Go players to play the augmented reality mobile game.
- This research investigates what sustained Pokemon Go players' ongoing participation with the game.

- This research explores the reasons/motives that caused Pokemon Go players to stop playing the game.

#### **1.4** Theoretical Aim

An individual's choice to participate and contribute to the ultimate success of Pokemon Go relied largely upon their motivation – their motivation to initially download the game, their motivation to participate in the game, and their motivation to continue to play the game. Motivation is the inclination to be moved towards action (Ryan and Deci, 2017). Research streams have previously shown that video game users are able to readily achieve satisfaction in meeting their needs for competence, relatedness, and autonomy through playing (Ryan and Deci, 2017; Maslow, 1954). In turn, these needs are motivational drivers for continued use of such mediums. However, before an individual is able to establish that their needs will be met through video game playing, what initially energizes or motivates them to even start playing a game like Pokemon Go is unknown. The psychological reality of motivational needs satisfaction through playing Pokemon Go is thus investigated in this study. The expectation of what players would get out of playing (Bartle, 2004) Pokemon Go and the intrinsic motivation (Ryan and Deci, 2000) that followed is also discussed.

The consumer decision process to participate in Pokemon Go involved a type of localized conformity that induced big shifts in mass behaviour. The big shift in mass adoption of the game and then its sudden decline of popularity relates to the life-cycle of a fad. The reasoning process behind fad adoption can be related to imitation (Bikhchandani, Hirshleifer, and Welch, 1992). An individual's inclination towards imitation takes into account the decisions of others as entirely rational even if individuals place no value on conformity for its own sake. Imitators avoid decision cost, and thus make inferior decisions based on observational lags (Conlisk, 1980). Fads are typically whimsical in nature and often change without apparent reason (Bikhchandani et al., 1992). Fads are a real phenomenon in the market, thus this research explores why Pokemon Go became a short-lived fad and the implications of this finding.

#### 1.5 Methodology

To address the research aim, 10 qualitative in-depth interviews were conducted on the Pokémon Go phenomenon. The purpose of qualitative research is to examine phenomena that impact the lived reality of individuals or groups in a cultural or social context (Mills and Birks, 2014). The data analysis of the interviews followed an inductive qualitative approach of inquiry, providing an in-depth picture of the real-life experiences of individual Pokémon Go players.

Pokémon Go players ranging in age and gender, and pre-conditioned as having reached beyond level 10 within the game, were actively sought in Auckland. Similar to Huang, Yang and Cheng's (2015) gaming motivations study, this research inquiry examined Pokémon Go player's usage patterns, usage motivation, and gratification obtained from playing the game. Why players stopped playing the game was also explored during the interviews. The interviews took place on the grounds of Auckland University of Technology over a one-week period from 27/03/2017 - 31/03/2017. The audio recordings of the interviews were then sent to an independent transcriber, who compiled the audio into Word format.

A realist perspective with a postpositivist framework guided the data analysis method of this inquiry. The method involved thematic analysis, which applied an inductive qualitative approach in identifying themes and patterns within the data. Reliability and validity of this research was established through the use of an interview guide during the data collection process, and the appointment of external reviewers during the data analysis process.

#### 1.6 Contribution of Study

This research inquiry contributes to motivation, gaming, and fad research. The study identified various motivators that contributed to the hype of Pokémon Go, specifically what motivated players to play the game, what sustained their ongoing participation with the game, and the various motives that caused players to stop playing. Herein, the significance of the findings of this research contributes to the theory of fad lifecycles, particularly how they spread across consumers and peak, as well as the various motives that cause them to eventually decline in popularity.

#### 1.7 Structure of Thesis

The structure of this thesis is as follows:

Chapter One – Introduction: The purpose of this chapter includes an introduction and background on the context and aim of this research.

Chapter Two – Literature Review: This chapter provides a comprehensive review of the conceptual, empirical, and methodological body of knowledge constituting the basis of this research inquiry. Fundamentally, this chapter delivers a summary of the present knowledge

on augmented reality, Pokémon Go, video gaming and its psychological components, engagement and interactivity, presence and community.

Chapter Three – Methodology: This chapter provides an overview and description of how this research was conducted, as well as presenting the methods and tools used in doing so. It yields qualitative research as the groundwork for this inquiry, presenting the procedure of the 10 in-depth interviews that were conducted and analyzed using thematic analysis.

Chapter Four – Findings: This chapter identifies and describes the seven major findings that arose from the thematic analysis. Notably, those themes include a sense of belonging, excitement, nostalgia, flow state, killing time, accomplishment, and stopped playing.

Chapter Five – Discussion: This chapter provides a detailed discussion on the results of the seven major findings, their link to the body of knowledge, and their implications for researchers and practitioners in the marketing, advertising, and gaming areas.

## **Chapter Two – Literature Review**

#### 2.1 Introduction

The context of this research is the entertainment sought by millions of people around the world in the form of an augmented reality mobile game named Pokemon Go. The volume at which a game like Pokemon Go can cause such a world-wide stir is of particular interest. In order to explain the Pokemon Go phenomenon and the cause of the hype behind the game, this chapter will provide the psychological context of the players that facilitated that hype. The topics covered in this chapter include a background on augmented reality, Pokemon Go, and the video gaming environment. The psychological aspects of gaming motivations are explored, further explaining how engagement, interactivity, and presence affect gaming involvement. This chapter concludes with a brief deliberation on brand communities and how they are relevant to the rise in Pokemon Go players.

#### 2.2 Augmented Reality

Imagination is the capacity to entertain alternative possibilities and realities which can be used to regulate a person's mood and personal experience, and provide them with a mode to escape and reenergize themselves (Leslie, 1987). Thus, human imagination capabilities are limitless and the role of modern technology has enhanced such experiences through the accessibility of virtual worlds (Ryan and Deci, 2017).

Over the years, society has seen a tremendous evolution in the way human to computer interactions occur. From accessibility to emotional design and persuasive technology, computers are now an essential part of our everyday lives. With this progression, or movement to a technological world, our entertainment needs have also shifted (Bryant and Love, 1996), moving past black and white television to the 3D augmented reality gaming of today (Javornik, 2016).

Augmented reality is an interactive technology developed to complement the physical world with an overlay of virtual elements such as information, images, and/or videos, in real time through a screen. It was first invented by film maker Morton Heilig in 1962, but as its original technology has changed over time, augmented reality has only just become the latest fashion in retail advertising and gaming settings, gradually rolling out into other industries (Javornik, 2016).

Its operation can be utilized either publicly through a large interactive screen or privately through a smart device and head-mounted displays (Javornik, 2016). Digital content that combines real imagery with virtual 3D digital graphics and/or text provides direct or indirect views of a real or physical world that is enhanced or 'augmented' by adding virtual information to it. On a smartphone, augmented reality can work by using GPS which identifies the device and the user at a particular place in time. The smartphone then stores image-based data from the camera into a database, allowing it to recognize what the camera is looking at. The system then pulls data from an internet-based source to overlay the image that the camera is tracking (Kim and Hyun, 2016).

Linking a cartoon concept like Pokemon with an augmented reality game provides users with a type of brand experience. Brakus, Schmitt, and Zarantonello (2009) conceptualized brand experience as "subjective, internal (sensations, feelings or cognitions) and behavioural responses evoked by brand related stimuli". They define brand related stimuli as a brand's design and identity, packaging, communications, and environment (Brakus, Schmitt, and Zarantonello, 2009). Brand experiences vary in their strength and intensity. In comparison to product experiences, brand experiences also vary in valence; for example, some experiences may be more positive than others, and some experiences may be more negative than others. A brand experience can be short lived and others may last longer. Over time, the experiences that are long lived are more likely remembered by consumers thus affecting consumer satisfaction and loyalty (Brakus, Schmitt, and Zarantonello, 2009; Chen et al., 2008).

The imaginative reality aroused by virtual elements of augmented reality games that are linked to pastimes can create real psychological experiences for players. The idea of an alternative reality provides an initial attraction or pull towards the game (Ryan and Deci, 2017) and the link to a pastime like Pokemon embellishes that experience. As the use of augmented reality increases, it has become essential to better understand the psychological experience it provides users and its effect on consumer behaviour. Pokémon Go, the first augmented reality game to really make a scene in New Zealand, will provide the setting for this research.

#### 2.3 Pokémon Go Background

The Pokémon Company is a media franchise first established in 1995 in the form of a videogame, followed by expansion into trading card games, animated television shows and movies, comic books, and even toys. Over its lifetime, Pokemon has maintained its

popularity as a brand for young children, and remains a memorable experience for those who grew up consuming it (Pokemon, 2016).

Pokémon Go is a free-to-play, location-based augmented reality game developed and published by Niantic for iOS and Android devices. The mobile application was launched on July 6<sup>th</sup>, 2016 in the USA, Australia, and New Zealand, and is now available in more than 36 countries worldwide (Niantic, 2016).

The nature of the game, which is based on the storyline of the TV cartoon series *Pokémon*, is that players use a mobile device's GPS capability to locate, capture (collect), battle, and train virtual creatures. The Pokemon characters appear on the players' mobile device screens in real time at the same location the players are in, therefore encouraging the players to search far and wide in the real, physical world to discover more Pokémon (Pokémon, 2016).

The concept of progression is the central feature of Pokemon Go, as players' training levels increase as they complete quests and missions. Another fundamental aspect of Pokemon Go is its social interaction feature as players gather to battle or train together at Pokestops. Pokestops are located at popular destinations, buildings, and monuments around the world, where player communication is easily accommodated in this way.

Nintendo, which owns a 30% share in Pokémon, saw share prices rise by \$12billion in 2016, and the app was generating over \$2million daily in in-app purchases (Pokémon Go earnings, 2016). During the height of its popularity, not only were investors in the company reaping the rewards of the game, but businesses such as restaurants and cafes were also benefiting from the app, as they were able to make an in-app purchase to "lure" Pokémon to their business location, attracting more people to their vicinity. McDonalds in Japan was the first official partner of Pokemon Go, where they launched a marketing campaign that turned 2900 restaurants into venues where people were guaranteed to catch new Pokemon creatures. Steve Easterbrook – CEO of McDonalds – reported that the affiliation to Pokemon Go presented numerous benefits for McDonalds' business. Similarly, Stonyfield, a yoghurt brand, tapped into the Pokemon Go enthusiasm by running a four-week advertising campaign that targeted 10,000 Pokestops in the USA. They ran ads with pertinent messages and links to nearby stores selling its products by using relevant Pokemon Go language (WARC Trends, 2016).

The magnitude of Pokemon Go's success may be credited to the nostalgia of a generation that grew up involved with the Pokémon brand, or also, the context of the game involving a

treasure-hunt like experience, which players may find gratifying. Overall, there is no denying its fast exponential growth, but what exactly led to this growth is unclear. Therefore, the psychological function of video games and how they motivate players to play is explored in the next section of this chapter.

#### 2.4 Video Gaming Background

Video games have traditionally been categorized as a leisure activity, a virtual environment as such, where players interact by means of their virtual representations. Fundamentally, they are a rich medium as they combine narrative, rhetorical, verbal, acoustic, and visual stimuli, as well as physical action by control of a simulated situation. This multisensory environment is defined by the activation of the video game player and the outcome is related to the player's behaviour, as players must understand and learn the content of the game. Such involvement requires full cognitive effort (Nelson and Waiguny, 2012).

Pokémon Go, which is a massively multiplayer online role-playing game of sorts, has flipped the script on traditional gaming experiences with its social and movement-based context. The game enables players to physically gather together in Pokémon filled locations (found on their devices), where they have a common goal of collecting, battling, and achieving status via an augmented reality style of play. It's a 'player versus environment' type server. With its open and non-linear nature, players are able to choose their own itineraries of development, and there is no specific end-point; rather, the game is varied in the location-based activities it provides (Fuster, Carbonell, Chamarro, and Oberst, 2013).

Massively multiplayer online role playing games (MMORPG) are essentially video games in which players create an avatar that evolves and interacts with other avatars in a persistent virtual world (Billieux, Linden, Achab, Khazaal, Paraskevopoulos, Zullino, and Throrens, 2013). There are four common roles that players undertake in most MMORPG, including Pokémon Go. These roles guide interactions between players, and take form as the following behaviours: (1) Tank – a role defined as a protector, these players protect their playing companions, ensuring they are not attacked or damaged by the enemy, (2) Damage Dealer – a destructive role usually seen as causing damage among the enemy, (3) Healer – a role charged with curing companions who have been damaged, and (4) the Supporter – a role combining the preceding attributes and may take different forms more oriented towards one of the three principal roles mentioned above. The different roles involved in MMORPG

highlight the complex interactions video games constitute for their players (Fuster, et al., 2013).

The player roles within Pokemon Go include Fuster and colleagues' (2013) findings specifically relating to the battle option within the game; however, the context of the game expands beyond battle. The collection of Pokémon within the game is a key element to progression. Progression is dependent on the level of involvement players commit to the game; therefore, understanding player personality is important.

Players of online video games have consistently been profiled in the literature as a variation of males and females, between adolescence to maturity, with an average age of 26 (Meredith, Hussain, and Griffiths, 2009). This contradicts conventional stereotypes that suggest that the greater percentage of video gamers is teenage boys. This demonstrates the capability of video games, bringing a range of people together who relate, interact, and collaborate during extended periods of time (Graham and Gosling, 2013; Meredith, et al., 2009; Fuster, et al., 2013).

Bartle (2005) formulated a taxonomy of player types as follows: Achievers – players who give themselves game-related goals and persevere to achieve them; Explorers – players who try and find out as much as they can about the game's virtual world; Socializers – players who use the game's communication facilities to interact with other players; and Killers – players who use the tools provided by the game to cause distress to other players (Bartle, 2005; Billieux, et al., 2013). The player types help to define what video gamers typically enjoy about gaming, as well as benefitting game designers in defining the requirements of games that are intended for a particular audience. The personal enjoyment of video-game behaviour draws insight into the motivations for sustained engagement.

The average online video gamer spends approximately 20 hours a week playing video games, so it is not difficult to imagine that traces of player personality traits could be collected through logs of their virtual interactions as well (Yee, Ducheneaut, Nelson, and Likarish, 2011). In personality psychology, the Big-5 model (Digman, 1990) is the gold standard for identifying personality traits. The model measures five traits, which Yee et al. (2011) modified to relate to video gaming behaviour specifically. They identified Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience as the five emerging traits of personality relative to virtual behaviour. Table 1 below provides a summary of these personality traits as they relate to video gaming.

Table 1: Personality Traits Relative to Virtual (Video Gaming) Behaviour

EXTRAVERSION	According to the trait definition, individuals who score high on the Extraversion trait, tend to be characterized as outgoing, gregarious, and energetic, while those who score low on Extraversion tend to be reserved, shy, and quiet.
	In terms of behavioural indicators relative to video gaming, individuals who score high on Extraversion tend to prefer group activities. They generally have a higher ratio of achievements which requires collaboration with other players. This implies that those who are categorized as extraverted may also show signs of social promiscuity.
AGREEABLENESS	According to the trait definition, individuals who score high on Agreeableness tend to be friendly, caring, and cooperative, while those who score low on Agreeableness tend to be suspicious, antagonistic, and competitive.
	In terms of behavioural indicators relative to video gaming, individuals who score high on Agreeableness give out more positive emotes i.e., hugs, cheers, and waves, and prefer non- combat activities such as exploration and/or creating.
CONSCIENTIOUSNESS	According to the trait definition, individuals who score high on Conscientiousness are organized, self-disciplined, and dutiful, while those who score low on Conscientiousness are careless, spontaneous, and easy-going.
	In terms of behavioural indicators relative to video gaming, individuals who score high on Conscientiousness seem to enjoy disciplined collections in non-combat settings. This is reflected in having a large number of vanity pets, which must be collected one at a time, reflecting self-discipline in collecting and exploring (as well as patiently staying put for significant amounts of time in these locations).
EMOTIONAL	According to the trait definition, individuals who score high
STABILITY	on Emotional Stability are caim, secure, and confident, while those who score low on Emotional Stability are nervous, sensitive, and vulnerable.
	Relative to video gaming behaviour, individuals who score low on Emotional Stability prefer Player versus Player related activities, while individuals who score higher on Emotional Stability are more likely to have characters of the opposite gender.

<b>OPENNESS TO</b>	According to the trait definition, individuals who score high
EXPERIENCE	on Openness to Experience are abstract thinkers, imaginative, and intellectually curious, while those who score low on Openness to Experience are down-to-earth, conventional, and traditional.
	In terms of behavioural indicators relative to video gaming, individuals who score higher on Openness have more characters and they are more likely to spend more of their play-time exploring the virtual world of the game. They also spend more time participating in non-combat activities, such as creating and participating in group activities.

Source: Yee et al (2011).

The relevance of Yee and colleagues' (2011) big 5 model to Pokémon Go is that people imprint part of their personalities purposefully or unknowingly into both the physical and digital spaces they inhabit. The game design of Pokemon Go suggests that its players may be more likely to be characterized under the extraverted, conscientiousness, and openness to experience traits. This is because the game's social design encourages team work, and because of the exploration and collection feature of the game. Acknowledging that there is a relationship with individual personalities and behaviour in gaming environments provides some context in identifying Pokémon Go player motivation (Yee et al., 2011; Graham, Samuel, and Gosling, 2013).

#### 2.5 Gaming Motivation

To be motivated means to be moved to do something. An individual who feels no desire or inspiration to act is thus characterized as unmotivated. An individual who is energized or activated toward an end is considered motivated. Individuals vary in levels of motivation (e.g., how much motivation) and orientation of motivation (e.g., what type of motivation, e.g., underlying attitudes and goals that give rise to action). The most basic distinction is between intrinsic and extrinsic motivation. Intrinsic motivation refers to doing something because it is interesting or enjoyable and extrinsic motivation refers to doing something because it leads to a separable outcome (Ryan and Deci, 2000).

The motivation experienced by video game players can be both intrinsic and extrinsic. For example, an individual's desire for prizes, grades, fame, or the achievement of accumulating power may be considered as being extrinsically motivated. A desire for social interaction, a sense of belonging, or the satisfaction derived from forming and maintaining relationships

can be considered as intrinsically motivating (Huang, et al., 2015; Banyte and Gadeikiene, 2015).

Yee (2006) created an empirical model measuring a player's motivation to engage in online games. In his analysis, he revealed 10 motivational subcomponents that are grouped into three overarching components of motivation: Achievement, Social, and Immersion. Similar findings have also been noted in previous studies. Table 2 below provides an organized summary of player motivations to engage in online games.

Table 2: Player Motivation to Engage in Online Games

ACHIEVEMENT:	<ol> <li>Advancement: Desire to gain power, progress rapidly and accumulate in game symbols of wealth and status (Billieux, et al., 2013; Hussain and Griffiths, 2014; Yee, 2006).</li> <li>Mechanics: Interest in analyzing the underlying rules and system in order to optimize character performance (Billieux, et al., 2013; Yee, 2006).</li> <li>Competition: Desire to challenge and compete with others (Sherry, 2004; Yee, 2006).</li> </ol>
SOCIAL:	<ol> <li>4) Socialising: Engaging in social interactions (Sherry, 2004; Hussain and Griffiths, 2014; Vorderer, 2001; Mahlangu, 2015; Yee, 2006).</li> <li>5) Relationship: Desire to form long-term meaningful relationships with others (Hussain and Griffiths, 2014; Yee, 2006).</li> <li>6) Teamwork: Deriving satisfaction from being a part of a group effort, as well as providing players a sense of belonging through an online community (Billieux, et al., 2013; Hussain and Griffiths, 2014; Yee, 2006).</li> </ol>
IMMERSION:	<ul> <li>7) Discovery: Desire to find out and know the game's elements or places that most players do not know about (Billieux, et al., 2013; Yee, 2006).</li> <li>8) Role-play: Tendency to create a character with a background story and the desire to interact with other players according to their story (Sherry, 2004; Yee, 2006).</li> <li>9) Customization: Interest in customizing the appearance of their avatar (Yee, 2006).</li> <li>10) Escapism: Tendency to use the online environment to avoid thinking about real-life problems, pass time, and/or escape from life stressors (Billieux, et al., 2013; Sherry, 2004; Rossi, 2009; Hussain and Griffiths, 2014; Vorderer, 2001; Mahlangu, 2015; Yee, 2006).</li> </ul>

Adapted from Yee (2006).

Fundamentally, these findings highlight the underlying needs that are sought for or aroused by video gaming, particularly highlighting the positive implications for players (Hussian et al., 2014). These subjective needs in-turn produce an effect on players' motivation to engage in a medium that they assume will meet those specific needs (i.e., playing video games). If those entertainment needs are no longer being met, then media migration occurs (Shade, Kornfield, and Oliver, 2015). However, an individual's motivation to play a video game is not always sustained only through their entertainment needs; sometimes it goes beyond this, and is attributed to a fundamental passion for the game.

#### 2. 5. 1 Passion:

Passion has long been noted in psychology as an antecedent to motivation. The term passion can be used to help us understand one of the underlying psychological processes involved in gaming motivations (Wang, Liu, Chye, and Chatzisarantis, 2011).

Vallerand and his colleagues (2003) defined passion as "a strong inclination toward an activity that people like, that they find important, and in which they invest time and energy". Thus, for an activity to represent a passion for people, it has to be significant in their lives, something that they like, and something on which they spend time on a regular basis (Vallerand, et al. 2003; Wang et al., 2011).

There are two different levels of passion identified in the literature: Harmonious Passion (HP) and Obsessive Passion (OP) (Vallerand et al., 2003). These constructs predict the different ways in which players engage with online video games and help us to understand different motivational patterns demonstrated by players.

Harmonious Passion (HP) results from an autonomous internalization of an activity into the person's identity. Autonomous internalization occurs when an individual deems the activity important to them, producing a motivational force to engage in the activity. With this type of passion, the activity occupies a significant but not an overpowering space in the person's identity and is in harmony with other aspects of their life. It has been shown that harmonious passion leads to positive affect, concentration, satisfaction, and flow. In a gaming context, HP is linked to player behaviours of exploration, socialization, and achievement (Vallerand et al., 2003; Wang et al., 2007; Fuster, Charmarro, Carbonell, and Vallerand, 2014).

In contrast, Obsessive Passion (OP) is characterized by an internal pressure/uncontrollable urge that forces a person to engage in his or her passionate activity and leads to conflict with

activities in their other life domains associating to negative outcomes before and after activity engagement. It has been found that obsessive passion is related to negative emotions, low levels of enjoyment, rigid persistence, and self-destructive behaviour. In a gaming context OP is related to escapism and achievement (Vallerand et al., 2003; Wang et al., 2007; Fuster et al., 2014).

The dualistic model of passion is a new attempt to explain how individuals experience an inclination toward an activity in which they invest time and energy. The model consists of two scales. The first scale measures the degree to which a player likes the activity, how they value the activity, how much time and energy they dedicate to that activity, and lastly whether they consider it a passion. The second scale is used to measure motivations involved in playing. These motivations, similar to Yee's (2006) motivation model, include evaluating the player on their in-game behaviours such as socialization, exploration, achievement, and dissociation. Thus, the dualistic model of passion shows that the constructs of motivation and passion can be integrated into an exploratory model of gaming behaviour in which HP and OP guide the various motivations experienced by players playing video games (Vallerand et al., 2014).

Notably, not all video game players are passionate, especially when playing a game for the first time. For such players, their motivation may be attributed to their entertainment needs rather than passion.

#### 2. 5. 2 Entertainment:

Entertainment can be seen as a multidimensional construct of experiences that help media users cope with everyday life, in this case media referring to video gaming. For some it is a way to compensate during unpleasant times, and for others it is used for a means of fulfilment of one's own potential (Vorderer, 2001).

The notion of entertainment can also imply a form of play. According to Oerter (1999), play is a specific form of action that is measured by three main characteristics: (1) it is intrinsically motivated and highly attractive, (2) it implies a change in perceived reality, as players construct an additional reality while they are playing; and (3) it is frequently repeated (Oerter, 1999).

Media users try to use play as a method for escaping or controlling their existing realities through a second reality that they generate through entertainment. Play has its own innate motivators; what makes play enjoyable is its built-in rewards due to the excitement of uncertainty, referred to as "having an edge" (Vorderer, 2001; Oerter, 1999). An increased level of uncertainty heightens the "edge" experienced in play. This often includes the play elements of demand, challenge, and stress, for example, a perceived urgency, importance, and significance associated with the experience (Csikzentmihalyi, 1990; Faiola, Newlon, Pfaff, and Smyslova, 2013).

In the past, definitions of entertainment have been confusing and misinterpreted in many contexts. Vorderer (2001) stated that people differ in what they deem as entertaining. As well as the positive emotions expected from entertainment, it can also evoke unpleasant or distressing experiences such as fear or suspense. For example, Excitation Transfer Theory (Zillmann, 1983) proposes that the residual excitation from preceding distressing emotions, such as fear of death during videogame playing, is transferred into the subsequent euphoric emotion, such as relief. Therefore, players can experience switches from distress to pleasure quite easily during consumption, serving an intrinsic gratification.

Gratification is a goal-directed subjective evaluation of the outcome that individuals seek to obtain when using a particular medium (Katz, 2010; Urista, Dong, and Day, 2009). Media use is seen as a way to manage our emotional states primarily through enjoyment. An individual's decision to use a particular medium is largely a function of that individual's expectation of potential enjoyment. Entertainment is tied closely to emotional enjoyment, sometimes perceived as the same thing (Sherry, 2004).

The Uses and Gratifications Theory builds upon the assumption that people select a medium that best fulfils their needs (Huang, Yang, and Chen, 2015). Previous literature (Mahlangu, 2015; Huang and Yang, 2015; Yee, 2006; Wan and Chiou, 2006; Koo, Lee, and Chang, 2007) has successfully applied the Uses and Gratification Theory to study and explain gaming motivations. The Uses and Gratifications Theory suggests individuals possess various underlying motives for engaging in particular mediums. The need for entertainment, escape, relaxation, and satisfying boredom are often drivers of gaming. The Uses and Gratification Theory differentiates three types of psychological gratifications that influence gaming, namely, entertainment, passing time, and escape. Escapism represents the tendency to seek a distraction or relief from unpleasant realities, by seeking entertainment (Mahlangu, 2015; Wan and Chiou, 2006; Koo, 2009; Yee, 2006). Passing time suggests that individuals choose to play games when they feel they do not have anything better to do and want to kill time

(Mahlangu, 2015; Sherry, Lucas, Greenberg, and Lachlan, 2006). If these needs are gratified, then they are likely to repeat such an experience. In contrast, if a video game player's needs for entertainment are not met, the game to them becomes unenjoyable and media migration occurs.

#### 2. 5. 3 Migration:

Media consumers generally follow entertainment across media, migrating from one medium to the next to fulfil their different needs as they feel them. Migration functions as a behavioural indicator of media enjoyment. Motivation for migration is thus mediated by social and psychological characteristics, societal structure, social groups, relationships, and personal involvement (Shade, et al., 2015).

Shade and colleagues' (2015) study found four predictors of media migration: (1) individual differences, for example, lifestyle, personality, and loneliness; (2) media characteristics; (3) media habits/preferences; and (4) cognitive and affective aspects. Loneliness was found to be the strongest predictor of media migration (Shade, et al., 2015); however, social gratification alone is not sufficient to trigger a media user's continuance of use (Huang and Hsieh, 2014). The manner in which media users experience the consumption process is as important as the gratification of their social needs. These factors together determine an individual's intention to continue the use of a media like Pokemon Go. Before migration can occur, some player involvement in the form of engagement and interactivity must be present for a player to be able to determine whether or not the game is meeting their needs or providing them any benefit.

#### 2.6 Engagement and Interactivity

Consumer engagement with video games is recognized as "social, interactive behaviour which is formed by a continuous involving processes" (Banyte and Gadeikiene, 2015). Engagement is behaviour that is accompanied by certain emotions and cognitions (Banyte and Gadeikiene, 2015). The process begins with familiarization with the object of engagement, which then evokes certain emotions and associations that could be both positive and negative. The emotions then prompt the gamer to act and become an active participant in the interaction with the object of engagement (Banyte and Gadeikiene, 2015).

In contrast to engagement, the Distraction Conflict Theory (Baron and Kenny, 1986) proposes that when a person experiences conflicts between focusing attention on a task versus focusing attention on a distractor, he or she may experience cognitive load problems, which are a result of attentional focusing. Attentional focusing entails an individual narrowing his or her attention to just a central set of cues while ignoring peripheral cues that may be present. The challenge is in minimizing the distractors and maximizing the telepresence and enjoyment components of a video game user's experience, therefore yielding a positive outcome (Baron and Kenny, 1986; Nah et al., 2011). This positive outcome is relevant to a player's willingness to re-engage with the video game.

Chen, Duh, Phuah, and Lam (2006) conducted 40 in-depth interviews with online gamers and found that flow and the types of in-game social interactions can both facilitate and hinder the enjoyment and engagement level of playing. Engaged gamers experienced high levels of enjoyment more frequently and valued the importance of social interactions more (Hussain and Griffiths, 2014; Chen et al., 2006).

As a central characteristic of online media, interactivity has important implications for a media user's behaviour. The general understanding is that interactivity has a positive influence on user experience and satisfaction; however, interactivity is a complex and multidimensional construct in which its effectiveness is subjective, dependent on both the person and the situation they are in. Interactivity is limited to the person or user's cognitive involvement, user-learning that results from a deeper cognitively involving experience, user satisfaction which is the level of active control users have, and the user's purpose for use (Liu and Shrum, 2002).

The construct of interactivity is a relevant phenomenon to investigate in the context of this research because of its entertainment power-causing engagement. If the Pokémon Go app provides its users an effective interactive experience, this may constitute partial evidence to suggest why its users enjoy and sustain participation with the game and vice versa. Therefore, a player's presence during engagement with the game and how this effects their continued use is of particular relevance.

#### 2.7 Presence

Video gaming is an active experience where players can become so physically, cognitively, and emotionally involved in playing, that they lose all sense of time and space (Nelson and Waiguny, 2012).

Presence is a psychological state or subjective perception whereby an individual is so utterly absorbed in an activity, that they are unaware of external stimuli. Whether or not "being

there" exists in physical space, it is the perceptual illusion of being immersed into another environment in which the virtuality of the experience is unnoticed. The concept of presence is particularly relevant to the design and evaluation of media and information technology interfaces, especially in the context of entertainment. Telepresence (Minsky, 1980), similar to presence, is characterized by its link to technology. It refers to a sense of transportation to a space created by technology or a 'virtual world', the out of body feeling of "being there" (Lee, 2004).

The psychological effect of telepresence on an individual stimulates increased enjoyment, involvement, persuasion, and memory (Nelson and Waiguny, 2012). Usually, when an individual's interactivity with a medium or object increases, the person's sense of telepresence also increases. Telepresence in the literature has been found to be both an antecedent to flow, as well as a component of flow. The intensity of telepresence can differ by media form and has a direct impact on consumer behavioural intentions due to the enhanced virtual experience (Nah, Eschenbrenner, and DeWester, 2011).

Telepresence also causes videogame players to become totally absorbed in the experience of a game's flow. In such a mental state, telepresence transports the player to a virtual space where their consciousness of time and space is unnoticed, while flow takes a prominent place. This therefore is considered an optimal experience (Faiola, Newlon, Pfaff, and Smyslova, 2013).

Flow Theory (Csikszentmihalyi, 1990) is the optimal state of experience in which a person is holistically absorbed and engaged in an activity. It is measured by the individual's balance between the difficulty of achieving a goal and the skill of that person. That balance must be achieved to be attributed to flow, otherwise, if the task is too easy for the individual, they will be bored, and if the task is too difficult for the individual, this will induce anxiety. If the balance does not exist, enjoyment, arousal, or 'flow' will not occur. Csikszentmihalyi (1990) defined enjoyment through the flow state as an "autotelic or self-motivating experience". Enjoyment of media has a variety of the same aspects of flow, for example, focused concentration, loss of self-consciousness, a sense of control, distortion, and the experience of the activity as intrinsically rewarding. Each media requires some experience or training in order to have the skills necessary to enter flow. Media enjoyment, therefore, is a direct result of having a flow experience. Flow offers a theoretical explanation for the gratification of

enjoyment (Sherry, 2004; Engeser and Rheinberg, 2008; Fong, Zaleski, and Leach, 2014; Nelson and Waiguny, 2012).

As a component of flow, an autotelic experience is the result of an activity or situation that produces its own intrinsic motivation, rewards, or incentives, specifically without any outside goals or rewards. In an autotelic state, individuals forget their personal worries, lose sense of time and themselves, feel competent and in control, have a sense of harmony and union with their surroundings, and cease to worry about whether the activity will be productive and whether it will be rewarded (Faiola, Newlon, Pfaff, and Smyslova, 2013). Csikszentmihalyi (1997) argued that "when we are in flow, we do not usually feel happy because we feel only what is relevant to the activity...it is only after we get out of flow that we might indulge in feeling happy" (Nah, Eschenbrenner, and DeWester, 2011).

The common elements of flow are characterized by (1) a challenging activity that requires a degree of skill, (2) a merging of action and awareness, (3) clear goals and immediate feedback, (4) concentration on the task at hand, (5) a sense of control, (6) loss of self-consciousness, (7) distorted sense of time, and (8) self-rewarding/autotelic experience (Nah, Eschenbrenner, and DeWester, 2011). Previous work (Csikszentmihalyi, 1990) has distinguished that flow is a useful construct for describing general human-computer interactions. Hoffman and Novak's (2000) research categorized antecedents to flow experiences using the constructs of interactivity, involvement, focused attention, skill, control, challenge, arousal, telepresence, time distortion, and exploratory behaviour. Flow was seen to occur in both goal-directed consumption behaviour and experiential consumption behaviour (Novak, Hoffman, and Duhachek, 2003).

The future sustainability of online environments and the functions and tasks they present to users will need to facilitate flow. In order to experience flow again, individuals seek new tasks and challenges. Therefore, it is imperative that designers of virtual worlds understand the mechanisms underlying the enjoyment of virtual experiences and flow. Flow research provides an important contribution to the understanding of an optimal experience (Faiola, Newlon, Pfaff, and Smyslova, 2013; Fong, Zaleski, and Leach, 2015).

In addition to individual flow experiences, individuals may also experience social flow while playing video games that cause them to interact with one another within a gaming community (Faiola, Newlon, Pfaff, and Smyslova, 2013). This is relevant to Pokemon Go as participants engaged in the game learn to play, establish group affiliations, and create a strong sense of

presence not only virtually but also physically. A Pokemon Go player's overall presence within the game may help to invoke feelings of community and belonging.

#### 2.8 Community

Video games ultimately are a shared, interactive social experience, and take place in a communal environment. They attract consumers who are interested and passionate about collaborating or competing with others for pleasure-seeking or hedonistic outcomes (Chen et al., 2008). Players of Massively Multiplayer Online Role Playing Games (MMORPG) routinely form, engage in, and complete gaming tasks to gain acceptance, admiration, and power within a group or guild. MMORPG gaming environments provide a medium for online consumption communities aiding the development of MMORPG-centred brand communities. MMORPG communities share the same characteristics as other online brand communities. Players experience intrinsic connections with other players, internalize symbols and imagery associated to the game, and develop a sense of moral responsibility toward their community. In an attempt to feel part of something bigger than themselves, individuals decide to join and immerse themselves within these communities (Badrinarayanan, Sierra, and Taute, 2014; Chen et al., 2008). The Pokémon Go phenomenon has very much created its own brand community both online and in public domains where members gather to play because of their affinity to the Pokemon brand.

#### 2.9 Conclusion

This chapter provided a review of the key literature regarding augmented reality, Pokemon Go, and video gaming, including its psychological components and player involvement. After a comprehensive review of the literature, it was found that there are extensive gaps in the body of knowledge regarding MMPORG, which is attributed to MMPORG being a relatively new phenomenon in the market place (Meredith, Hussain, and Griffiths, 2009).

Thus, this research intends to fill some of the gaps by investigating the most downloaded mobile gaming app to date, Pokemon Go. In doing so, this research seeks to understand what motives drove Pokemon Go players to play the augmented reality mobile game during the height of its popularity. It also investigates what sustained these players' ongoing participation with the game, as well as exploring the reasons/motives that caused Pokemon Go players to stop playing the game. The contribution of this study may help to support researchers and practitioner's understanding of Pokemon Go's success, and how to future-proof similar phenomena in the marketplace.

### **Chapter Three – Methodology**

#### 3.1 Introduction to Methodology

The purpose of this study is to understand what motives originally drove Pokemon Go players to play the augmented reality mobile game. It also investigates what sustained these players' ongoing participation with the game, as well as exploring the reasons/motives that caused Pokemon Go players to stop playing the game. This chapter justifies why qualitative research methods have been applied to this enquiry. Additionally, the philosophical assumptions governing this research are discussed. How the research was designed including its reliability concludes this chapter.

#### 3. 1. 1 Qualitative Research

The question asked by the researcher is critical to determining the methods used for data collection and analysis, which ultimately shape the dimensions and substance of the topic being examined (Taylor, Bogdan, and DeVault, 2015). This research seeks to identify what motives originally drove Pokemon Go players to play the augmented reality mobile game. It also investigates what sustained players' ongoing participation with the game and explores the reasons/motives that caused players to stop playing the game. As the nature of this study is based around the lived experiences of those people who engaged with the game, qualitative research is the most applicable methodology for the research inquiry.

The purpose of a qualitative research study is to examine phenomena that impact the lived reality of individuals or groups in a particular cultural or social context (Mills and Birks, 2014). It is research that produces descriptive data using individuals' own spoken words and observable behaviour. Qualitative researchers are concerned with the meaning people attach to things in their lives, understanding people from their own frames of reference and experiencing reality as they experience it (Corbin and Strauss, 2008).

The researcher undergoes an iterative process of interpretation of the examined phenomenon, trying to remain as unbiased as possible. This approach to the process is applied by a researcher distancing themselves from their preconceived ideas and knowledge about the world and viewing the data as if the experiences shared are happening for the first time. Consequently, this meticulous process will aid the development of concepts, insights, and understanding from the patterns within the data.

#### 3. 1. 2 Philosophical Assumptions

As individuals, we make everyday decisions based on how we view the world. This is shaped by our beliefs and lived experiences. The lens through which we view the world is our personal philosophy. Philosophy can be described as an attempt to understand how we know what we know (Mills and Birks, 2014).

Philosophical assumptions are embedded within interpretive frameworks. These assumptions are often referred to as paradigms that represent a shared way of thinking in respect to how we view the world and how we generate knowledge from that perspective. Relevant to qualitative research are the four philosophical issues of ontology, epistemology, axiology, and methodology.

Ontology is the study of reality; qualitative researchers embrace the notion of multiple realities and report their findings as such. Epistemology is concerned with knowledge, how knowledge claims are justified, and the relationship between the researcher and participant. Axiology is related to the researcher's role of values; the researcher acknowledges that research is value-laden and that biases are present. The paradigms of ontology, epistemology, and axiology are intrinsically linked and therefore guide the way the researcher acts, speaks, and thinks, also referred to as the process of inquiry or the methodology. Methodology, therefore, is the procedure by which the data is collected and analyzed (Mills and Birks, 2014; Creswell, 2007).

The philosophical framework guiding this particular research inquiry is postpositivsm (Denzin and Linclon, 2011). Postpositivsm research takes a scientific approach to the study in question, employing elements of reduction, logic, and determinism based on a priori theories (Creswell, 2007). The stance of postpositivist researchers is that they accept there are multiple perspectives of reality and espouse rigorous methods of data collection and analysis to support this interpretation.

The ontological belief of postpositivist researchers is that a single reality exists beyond ourselves; however, this is not fully understood because of a lack of obsolescence. The epistemological belief is that reality can only be approximated, constructed through research and statistics. The axiological belief is that the researcher's biases need to be controlled and not expressed within a study. The methods that follow the approach to inquiry are scientific in nature, seeking to glean new knowledge, specifying important variables, and making comparisons amongst groups (Creswell, 2007). Therefore, for the context of this research

inquiry, an inductive qualitative approach is the most appropriate method to answer the research questions.

#### 3.2 Research Methods

Methods, not to be confused with methodology, are the set of procedures and techniques produced to gather data and analyze it appropriately relevant to the research in question. Methods support the methodology or outcome desired by the researcher, which includes the choice and recruitment of research participants, data collection, fieldwork, data recording, data analysis, and reporting of the study. The methods applied to this research inquiry are semi-structured interviews that will be analyzed using thematic analysis.

#### 3. 2. 1 Data Collection Method – In-Depth Interviews

In-depth interviewing is often used by researchers as a digging tool that provides verbal accounts of social life (Taylor, Bodgan, and DeVault, 2015). The researcher acts as a cheerful data collector, asking respondents who have lived through the experience under investigation a set of predetermined questions, and allowing them to provide answers in their own words. The research asks questions without leading or causing the respondents to give answers they think the researcher wants to hear. Instead, the questions asked are open-ended, which allows the researcher to access and understand the individual respondent's experiences, beliefs, perceptions, motivations, attitudes, and feelings about the phenomenon under investigation.

The purpose of using semi-structured in-depth interviews for this research inquiry is to generate a complete understanding of the Pokemon Go phenomenon from the player's perspective. The term semi-structured refers to the series of questions asked by the researcher. First, an interview guide is produced, which contains a set of general and focused questions the research seeks to answer. Open-ended questions are carefully chosen to elicit relevant information during the interview, so although predefined questions are initially asked to support consistency amongst the different interview sessions, the conversation that occurs between the researcher and participant remains flexible and interactive. This means that the researcher has the freedom to tailor and expand on what they deem important information based on the dialogue with the respondent. Interviews are audio tapped with the permission of the respondent and then transcribed for data analysis.

#### 3. 2. 2 Data Analysis Method – Thematic Analysis

The process of data collection and data analysis are interrelated and often go on simultaneously during the research inquiry with the ultimate goal of gathering good

information (Creswell, 2007). Thematic analysis is a foundational method of qualitative analysis most commonly used in psychology. However, thematic analysis is not limited to only psychology; the method is also widely used across the social, behavioural, and more applied (clinical, health, education,) sciences (Braun and Clarke, 2006).

Thematic analysis is used to identify, analyze, and report patterns or themes within data. The process starts by initially reading the transcripts of the in-depth interviews, word-by-word, one by one. The researcher begins an iterative note taking task, outlining items of interest within the text whilst making sure that they maintain an open-mind. Researcher judgement is important in determining what is of interest within the data and requires some flexibility. The next task involves the researcher isolating meaningful units of information as emergent themes that are considered significant to the experience. This is done by reducing the detail of the data into a simpler code which does not deflect from the complexity of the emergent themes. The importance of a theme is not necessarily dependent on quantifiable measures, but rather on whether it captures something important in relation to the overall research question. The researcher then groups codes together that signify a relationship is present. The families of codes ultimately identify the overarching themes and if any sub-themes are present within the bigger themes. Themes are then given a definition which describes the complexity of the occurring phenomenon holistically (see Table 3 for overview of the thematic analysis process) (Van Manen, 2016; Mills and Birks, 2014; Braun and Clarke, 2006).
Phase	Description of the process
<b>1.</b> Familiarization of the data:	Transcription of data, reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding of interesting features within the data in a systematic fashion across the entire data set. Collating data relevant to each code using NVivo 8 software.
<b>3.</b> Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
<b>4.</b> Reviewing themes:	Checking if the themes work in relation to the coded extracts and the entire data set. Generating a thematic map of the analysis.
<b>5.</b> Defining and naming themes:	Ongoing analysis to refine the specifics of each theme and the overall story the analysis tells. Generating clear definitions and names for each theme.
<b>6.</b> Producing final description of themes:	Selection of vivid and compelling extract examples from the transcripts. Final analysis of extracts, relating analysis back to research question and literature.

Table 3: Phases of Thematic Analysis (Source: Braun and Clarke, 2006).

The establishment of themes or patterns within the data can be identified in two different ways in thematic analysis: in an inductive or bottom way up approach (Frith and Gleeson, 2004), or in a theoretical deductive or top down approach (Boyatzis, 1998). An inductive approach means the themes identified are strongly linked to the data. It involves a process of coding the data without trying to fit them into a pre-existing coding frame, or the researcher's analytic preconceptions. In this sense, this form of thematic analysis is data-driven. In contrast, a theoretical or deductive approach to thematic analysis is theory-driven. The process begins by hypothesizing about an issue and then testing if the theory applies or holds

true within a specific context (Boyatzis, 1998; Braun and Clarke, 2006). The approach applied to this research inquiry involved an inductive approach. The approach used also includes a latent mode of interpretation. A thematic analysis at the latent level goes beyond the semantic or surface content of the data, and identifies or examines the underlying ideas, assumptions, and conceptualizations that are theorized as shaping or informing the surface content of the data (Braun and Clarke, 2006).

The purpose of this inquiry ultimately is to identify what motives initially drove Pokemon Go players to play the augmented reality mobile game, investigate what sustained these players' ongoing participation with the game, and explore the reasons/motives that caused Pokemon Go players to stop playing the game. Thematic analysis has the ability to provide a rich and detailed, yet complex account of data (Braun and Clarke, 2006). Therefore, given the scope of this research, thematic analysis is a fitting data analysis method for this inquiry as it can be a method that works both to reflect reality and unravel the surface of reality (Braun and Clarke, 2006).

# 3.3 Research Design

The narrative explicating how this research inquiry was designed and conducted are explained in the following sections.

#### 3. 3. 1 Preparation

In preparation for the commencement of this research inquiry, the initial process began by planning the in-depth interviews that would essentially take place. This included establishing who would be best suited to participate in the research as a representative sample, deciding on the correct way to approach the potential respondents, and designing the interview guide. A proposal outlining these plans was presented to Auckland University of Technology in the form of a PGR1 (postgraduate research proposal), which was approved accordingly. The next step involved pursuing ethical approval for the research proposal from the Auckland University of Technology Ethics Committee (AUTEC). Access to the field was granted by AUTEC on February 22<sup>nd</sup> 2017, as the research proposed possessed no potential conflicts of interest (see Appendix 1).

In preparing the research proposal, it was concluded that the research participants would include Pokemon Go players of mixed genders and ages who identified as reaching an advanced level in the game. The interest in players who had reached an "advanced level" (beyond level 10 in the game) signified that those particular players had at some point in

time, been engaged with the game. Players who reached the game's fifth level were able to join a "team" – picking between three: Instinct, Mystic, and Valor. They were then able to place their Pokemon at an assigned "gym" (geographically popular locations, e.g., Auckland Museum, Mission Bay beach, etc.) to help their chosen brethren gain control of these destinations. Therefore, players who had reached a level higher than 10 during the recruitment period (August 2016) embodied the assumption of engaged behaviour with the game. The recruitment of players who ranged in age and gender also meant that the data collected was representative of a broader range of people, adding breadth to the holistic understanding of the Pokemon Go phenomenon.

An advertisement regarding the recruitment of potential respondents was placed on the researcher's personal Facebook page, which was then shared by the researcher's friends. Effectively, 12 participants who fit the criteria for the research were selected through this process. Contact details were exchanged between participants and the researcher, and a participant information sheet (see Appendix 2) and interview consent form (see Appendix 3) were then emailed to the respective participants. The participation information sheet outlined the purpose of the research, as well as when, where, and how the interview would take place, the incentive for participation (\$25 supermarket voucher), and the contact details of all those involved with the research. The consent form explained the respondent's rights during the interview process and sought their permission for the interviews to be voice recorded. Prospective participants had one week to accept the invitation to participate.

Prior to the interviews taking place, an interview guide was designed (see Table 4). The interview guide was a reminder tool for the researcher to use during the interview stage. It included the key topics and questions to be presented to the respondents to not only ensure consistency amongst the interviews, but also to make sure the research objectives were not forgotten during conversation with the respondents. The topics outlined in the interview guide included exploring the respondent's usage of Pokemon Go, their motivations for playing Pokemon Go, and general profiling questions. The guide also included probing questions for those core topics, in case interview fatigue arose for either the researcher or the respondent. The design of these core questions was based on presupposed knowledge that was gleaned from the literature review conducted prior to designing the research proposal.

In total, 10 out of the initial 12 participants approached accepted the invitation to participate in the study. Times and dates to interview each participant were then scheduled accordingly.

The interviews took place at the AUT South and City campus meeting rooms with the permission of the university and each respondent.

Table 4:	Interview	Guide
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Topic of Interest	Question	Probes
Usage: Can you please tell me about your usage of Pokemon Go? Such as	<ol> <li>How long have you been playing Pokémon Go?</li> <li>How often do you play Pokémon Go?</li> <li>How long do you usually spend playing Pokémon Go in one sitting?</li> <li>On average how many hours do you spend playing Pokémon Go a week?</li> </ol>	<ul> <li>Did you watch the Pokémon series on TV as a child? If so, how did you feel about Pokémon then?</li> <li>What team do you belong to in the game? Do you feel this team affects the way you play?</li> <li>What level are you currently up to in the game?</li> </ul>
Motivation: Can you explain to me why you started playing Pokemon Go?	5. What attracted you to play the game/ what triggered you to play?	<ul> <li>Where do you usually go to play the game?</li> <li>How do you see yourself with the game?</li> <li>While you are playing, are you aware of the time or the amount of time you spend playing?</li> <li>What words would you use to best describe how playing Pokémon Go makes you feel?</li> <li>What do you enjoy most about playing the game?</li> <li>Do you usually play alone or with friends?</li> <li>Have you made any new friends from playing?</li> <li>How difficult do you find the game to play?</li> <li>Would you consider yourself up to speed with how the game works? If so, are you satisfied with the level of control you have in the game?</li> </ul>

		<ul> <li>Do you often play games on your phone? If so, how many are you currently playing?</li> <li>Do you play any other games more than Pokémon Go? If so, why?</li> <li>Will you continue to play Pokémon Go? Why or why not?</li> </ul>
Profiling	<ol> <li>Gender</li> <li>Age</li> <li>In what suburb do you reside?</li> <li>What is your occupation?</li> </ol>	

# 3. 3. 2 Participants

This research actively sought Pokemon Go players from Auckland, New Zealand during the month of August 2016. The pre-condition regarding participant selection was that each respondent must have reached a level beyond level 10 in the game, and be willing to share their experiences with the game in a research setting. Ten participants who fit the pre-conditions of the research aged between 18 - 25 years, including both males and females were recruited. The 10 participants came from different walks of life, although they were all from the Auckland region, and they had played Pokemon Go for less than six months. Table 5 below presents a profile of the 10 research participants whose interviews form the data set for this research inquiry. For the purpose of anonymity, each respondent has been given a pseudonym (e.g., R1) representing the order of the interviews that took place.

 Table 5: Profile of Research Participants

Respondent:	Gender:	Age:	Occupation:	Residence:	Length of participation with Pokemon Go	Level reached within game
R1	Female	18	Student	Sandringham	1-2 months	12
R2	Female	23	Immigration Officer	Mt Eden	3 months	15
R3	Female	25	Immigration Officer	Flat Bush	3 months	11
R4	Female	25	Mechanic Apprentice	Bucklands Beach	2-3 months	20
R5	Female	25	Insurance Broker	Botany	1 month	23
R6	Female	19	Student	Papatoetoe	2 months	15
R7	Female	22	Student and Part-time Contact Centre Employee	West Harbour	4-5 months	16
R8	Male	25	Marketing Co-ordinator	Papatoetoe	6 months	Unknown
R9	Male	22	Student	Papatoetoe	2-3 months	21
R10	Male	18	Student	Onehunga	Unknown	16

# 3. 3. 3 Data Collection

The interviews were all conducted at convenient times and dates selected by the participants over a one week period from 27/03/2017 - 31/03/2017. The interviews were conducted in private meeting rooms at the AUT South and City campuses, where no interruptions to the interview could take place. Upon meeting, the researcher attempted to make the participants comfortable and put them at ease by discussing general topics such as how their day had been, and the weather. The participants were then presented with the interview consent forms to sign. The participants were instructed that on signing the consent forms, commencement of the interview and the voice recorder would begin. Participants were also instructed that they were able to opt out of the research process at any stage and in doing so any data they

provided would be excluded from the research. All participants were happy to proceed with the research and had no issues with their data being kept and analyzed.

The interviews were framed as a focused conversation, rather than a formal interview. The purpose of a relaxed setting was to help put the participants at ease, and enhance the rapport between researcher and participant. The interview guide was used in all the interview sessions; however, other topics of interest that came up in each interview were also covered during the sessions. The researcher managed the interviews with the participants through attention, sensitivity, and allowing respondents to talk freely. The interview sessions took approximately 15 to 30 minutes in total. Upon completion of the interviews, participants were rewarded for their time with a \$25 supermarket voucher. Participants were aware of this incentive prior to the interviews taking place; however, knowledge of the incentive did not affect the quality of the interviews.

#### 3. 3. 4 Data Recording – Transcriptions

Upon completion of the data collection, 8 of the 10 audio tapes of the interviews were sent to an independent transcriber registered on the AUT transcriber agent list. The other two interviews were transcribed personally by the researcher to save time and money. The transcription agent took two weeks to return the eight transcriptions. Once the data set was received, the researcher double checked that the content on all the tapes matched the text on the transcriptions, and no omissions or alterations had been made. The replay of the interview sessions helped the researcher re-familiarize herself with the data and the context of each respondent's expressed experiences with Pokemon Go.

#### 3. 3. 5 Data Analysis

A realist perspective was applied to the thematic analysis of this research. The method of thematic analysis reported the experiences, meanings, and realities of the 10 participants of the study. Ongoing reflexive dialogue by the researcher in the analytic process formed the coding and theme development of this research. Reflexivity is an attitude of attending systematically to the context of knowledge construction, especially on the part of the researcher, at every step of the research process (Creswell, 2011).

The data analysis for this research was conducted using a qualitative data analysis software package, namely, NVivo 8. Nvivo allows researchers to import rich text-based data into the software. The software is used to organize, classify, sort, and arrange information, examine relationships in the data, and combine analysis. The researcher is able to then test theories,

identify trends, and cross-examine information in a multitude of ways. The researcher can make observations in the software and build a body of evidence to support their case.

Once the entire dataset of the 10 transcripts had been imported into NVivo, the researcher commenced the analysis process. Phase one involved reading and re-reading the transcripts, and noting down initial ideas or items of interest within the data. By doing this, the researcher began to familiarize herself with the data set and facilitate an initial interpretation of the data.

Phase two involved searching and developing codes. Codes identify a feature of the data that is interesting and are classified as the most basic elements of the raw data. Coding also involves organizing the interesting elements of the data into meaningful groups. Table 6 below provides an example of how coding was developed for a short segment of data within this research. The coding process for this research involved the search for both theoretically driven ideas as well as identifying data driven information.

Table 6: Da	ta Extract	with (	Codes A	Applied
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Data extract	Codes
"I thought I just wanted to try it out, um, I	1. Other people stopped playing
didn't turn out to be a big fan of it and I just	2. Game was boring
kind of kept playing because everyone else	3. Socially influenced
was, I don't know, it was kind of something	4. Getting rid of boredom
to just kill time and eventually it just didn't	
have any interest anymore" – R1.	

Phase three involved the process of searching for themes based on the codes identified. A theme captures something important about the data in relation to the research question and provides some level of patterned response or meaning within the data set. This phase refocused the analysis on a broader level of themes rather than codes, and involved sorting the different codes into potential themes by collating the codes and their extracts within the identified themes. The identification of potential themes was established by analyzing whether the information the codes represented portrayed any patterns or relationships, or could be combined to form an over-arching theme or sub-theme.

Phase four involved the review of the candidate themes proposed in phase three, and refining those themes so that they expressed meaningful patterns of information within the data. The themes developed by the researcher were cross-checked by two supervisors. Collaboratively, the three researchers worked together to eliminate themes that were insufficient, as well as to collapse themes together that identified the same information and to break themes down. Ultimately, the three researchers managed to refine the candidate themes into coherent themes and sub-themes that adequately captured the contours of the data in response to the research questions.

Phase five was carried out by the researcher, who defined the themes identified in phase four. Latent interpretation of the codes and the essence of what they represented was also carried out during this stage. The definition of each theme was based on the information represented in the data set, which is provided in Chapter 4 - findings. The interpretations that presented the story of what the data were saying in regards to the research questions were justified through a review of the literature (see Chapter 5 – Discussion).

### 3.4 Issues of Reliability and Validity

Reliability in thematic analysis measures the level of consistency in the research setting. Consistency means being able to replicate the study and therefore able to produce the same results. This research aimed to maintain its reliability throughout the course of its completion by consistently carrying out and giving careful attention to the rules and conventions of qualitative research (Guest, MacQueen, and Namey, 2012). The interview guide developed for the data collection phase provided both the questions presented in the interview settings as well as probes for those questions, which allows for comparability of results. However, replication was not a goal of this research, and the purpose was to simply understand and explain the Pokemon Go phenomenon from the consumer perspective, and describe the causes of its "fifteen minutes of fame". The data collection process was semi-structured in nature and required inductive probing; therefore, generalizability of the findings cannot be made.

Validity in qualitative research comes from the analysis procedures of the researcher, based on the information gleaned while visiting with participants and from external reviewers (Creswell, 2011). The findings and interpretations of this research were thoroughly checked by the researcher's two supervisors. The codes and themes developed during the thematic analysis were discussed, negotiated, and cross-checked by both supervisors before they were finalized. The process of cross-checking the results of the analysis supported the credibility of this research. Credibility refers to the confidence in the truth of the findings, including an accurate understanding of the context (Guest, MacQueen, and Namey, 2012). Therefore following this procedure increased the degree of transparency within this study.

# **Chapter Four – Findings**

#### 4.1 Introduction

This chapter presents the results of the thematic analysis undertaken on the primary data collected from the in-depth interview sessions with 10 research participants. The purpose of this research is to identify what motives initially drove Pokemon Go players to play the augmented reality mobile game, what sustained Pokemon Go players' ongoing participation with the game, and to also explore the reasons/motives that caused Pokemon Go players to stop playing the game.

Thematic analysis was conducted with a realist perspective, using an inductive semantic approach to give logic to themes that emerged from the data.

The data analysis revealed seven explicit themes related to the research question: (1) A sense of belonging, (2) Excitement, (3) Nostalgia, (4) Flow State, (5) Killing time, (6) Accomplishment, and (7) Motivations not to play Pokémon Go. The discussion of these themes and how they emerged are explained in the following sections of this chapter.

### 4. 1. 2 Description of Pokémon Go Phenomena

Pokemon Go hit the ground running the moment it was released into the market, breaking app and play store download history with 10 million+ downloads in the first week of its release on July 6<sup>th</sup> 2016. For the next few months after its release it dominated both the online and offline world with its presence. However this dominating presence was short lived, with many players no longer playing.

The first of the six major themes that emerged from the data are related to the complex nature of the psychological factors that motivated Pokémon Go players to play the game and what sustained their ongoing participation with the game. The seventh theme that emerged from the in-depth interviews was that all of the participants who had once been highly engaged in playing Pokémon Go had all stopped playing the game and had no current intention of playing the game again. This finding explains how Pokémon Go went from becoming an overnight sensation to its fast and unprecedented demise. The context of this chapter provides insight into the intricate details that supported the viral success of Pokémon Go as well as how it lost its popularity in a short period of time, offering valuable implications for the likes of future equivalents of the Pokémon Go phenomenon.

## 4. 1. 3 Overview of Chapter

The outline of this chapter begins by presenting the first six themes that emerged from the thematic analysis relevant to the psychological framework of motivations for playing Pokémon Go. The six themes will be explicated relevant to the initial codes that were established from the interview transcripts during analysis (see Figure 3). The seventh theme relevant to why players stopped playing Pokémon Go is then explained by also drawing on the findings from the interview transcripts, which were categorized as sub-themes, almost mirroring the initial motivations for playing Pokémon Go (see Figure 4).

#### Motivations to Play Pokémon Go



Figure 3: Overview of Findings "Motivations to Play Pokémon Go"

**Motivations to Not Play Pokémon Go** 



Figure 4: Overview of Findings "Motivations to Not Play Pokémon Go"

# 4. 2 Theme 1 –Sense of Belonging

The first prominent theme to stand out from the data in regards to the psychological motivations for initiating participation with Pokémon Go is the player's 'sense of belonging' (See Figure 5). The socially based construct of a player's sense of belonging is manifested by five distinct codes that explain how a player fulfilled their need for social connectedness through Pokémon Go. The five distinct codes within this theme include various internal drivers that affected a player's intrinsic social identification such as 'fear of missing out' and 'socially influenced'. The codes also include external actions that facilitated interpersonal behaviours relative to 'belonging' such as 'increased social interactions', bonding with friends or family' and the 'Pokémon Go Community'. These codes and the way they fit within the overarching theme of a 'sense of belonging' will be explained below.

# **Theme 1: Sense of Belonging**



# Figure 5: Theme 1 Sense of Belonging

# 4. 2. 1 Social Influence

Fundamentally, the players' internal drivers for social connectedness that provided them with a sense of belonging began with the social influence to play Pokémon go. Social influence refers to players' initial participation in Pokémon Go based on the fact that their friends and/ or family members were also playing the game at the time. The following excerpts from interview transcripts focus on this fact:

"Ah when I first downloaded the game it was because my brother suggested it because he wanted my phone to play Pokémon Go because his phone was like old so he couldn't download it. So then I, I also got into it like catching Pokémon's and like all my friends were into it so I think it was like, because my friends were doing, it I was doing it. I was always playing with friends. It was like a get together kind of thing! Like you invite your friends then like they, your friends invite their friends so it kind of gets like a big social gather, gathering." – R6

"I was engaged because of my friends basically, When I visited them and they want to go do stuff specifically and then I would just go on it because they're on it too." -R2

The comment of Respondent 2 above indicates how social influence affected the player's engagement with the game. Word-of-mouth communication between the players resulted in Pokémon Go going viral both offline and online at the time of its release. This word-of-mouth effect between peers created a social infection of Pokémon Go hype, as the transcript excerpts below show:

"Because everyone was talking about it and like the group I hang out, like they were just, that's all they were talking about at one point. They're like oh my god I got this, I got that. I'm like oh I don't want to have to miss out. And so that's why me and my sister would go out so I could get stronger Pokémon's." – R7

"Um I guess, the trigger was friends talking about it and saying oh my god have you tried it and, and you know then day to day now conversation and stuff like that it's quite important to be able to relate to people. And so I guess especially being in marketing I interview students all the time so um now like I, I make sure I go out of my way to try new things when they come out. So when Pokémon Go came out I made sure I tried it so I could also relate it back to my job. If a student comes I could try, oh have you tried Pokémon Go ye?. It's like an ice breaker." – R8

Moreover, playing Pokémon Go was something that friends and family could do together when they convened, as shown in the transcript except below:

"It was the hype with my boyfriend's mates. They used to literally go out at night and they used to go to like the reserve, they used to go walking, they used to get out of the car and actually go for like walks, and then I just kind of wanted to go with them so I started playing. So I started playing because of that reason. It's the social aspect because he'd be like oh I'd be like what are you doing today and he's like oh I'm just going to meet up with the boys and go Pokémon hunting. I was like oh. I want to come. Yeah and I feel left out so I started playing it and then it turned into competition between me and him." – R7

The game also gave the players something they could connect with when they were not physically with their friends or family, as shown in the transcript excerpt below:

"Whereas, my brother's girlfriend who got me into it she, she um works out in Sylvia Park so there wasn't as many elements that she could play with. She was more limited, whereas I had everything there and I had you know access to everything. So I could just go for a walk and I would catch more than she could and it was more like a competition between us because, she's a real nerd so then if I could beat her in certain things it was like haha." -R5

Finally, social influence to play Pokémon Go stemmed from individuals' awareness of the people and their peers around them who were also playing the game. As crowds of people would physically congregate to play Pokémon Go all over the city, players sharing their participation with the game through social media also enhanced awareness for the game, as shown in the transcript excerpts below:

"I would sit at a bench and there would be three people next to me playing and we'd all have a conversation about it and the amount of people that I spoke to just because, you know, everybody's talking about, you're walking around the city and you just get immersed in conversations with people. It was really social and people wouldn't believe me when I'd say oh I've spoken to 12 people on my lunch break about this." – R5

"I played Pokémon Go for about six months and um the reason I found out about it was through social media and I started playing it because everyone else was playing it really not really because I was a fan of Pokémon or anything like that but it was just sort of joined in on the hype of the game, yeah." – R8

"I was like I was I was snapchatting like the whole situation and my friend's like I'm there too. I'm like, what? Yeah it's really fun." - R6

### 4. 2. 2 Fear of Missing Out

'Fear of missing out' is the second element in the 'sense of belonging' theme. This code further elaborates the social contagion of Pokémon Go, specifically the "hype" factor which was communally used by a majority of players who suggested that they played Pokémon go because of the hype, or because everybody else was doing it. In this context, the fear of missing out is relevant to the elements within the game and the perceptions players felt they had to contend with in keeping up with others around them who were also playing, as shown in the transcript excerpt below:

"Yeah like I've thought about deleting it off my phone, I'm like nah just leave it. Like I still have it on my phone. I opened it up last week but there was nothing around me so I just closed the app. But I still have it and I wouldn't get rid of it. In case it comes back like the hype comes back and people start playing again then I'm already on level like 16 so I'm like okay I can just pick up from there but yeah I, I would play it again. I don't know everyone just stopped talking about it so I just stopped playing it. And no one was really playing it so I just yeah. If people still played it I would have still played it." – R7

"The most important factor of it was like to get people to go around because usually when you trade games it's usually just at home or on your phone and stuff. Whereas this Pokémon game, like it encourages you to walk around and like, just and like hopefully meet other people playing the same game so you can go out with friends and stuff. But I think it's more just like on you know how it's like there's like fads and stuff like all get this hype get on the hype train. So I think the most, the most like the recent Pokémon was put so popular is like because people want to be like, oh look I'm playing Pokémon Go like back in the day like you used to do like people would be like oh if you played Pokémon you're a nerd and stuff but nowadays like nerds are cool you know." – R10

"Um, like something that really triggered, triggered me was I think it was just really popular on internet so I was like I should play too because everybody else is playing, not really like, I didn't think about, what I, I was doing!! I was like well since everyone's playing I'll play too because like you kind of start having the conversation with your friends about it so you don't feel left out I guess yeah." – R6

Another interesting component of this code is that players who were engaged with the game found new ways to stay active with the elements of the game so that they could continue to "keep up" with their peers or other players of the game, for example, downloading other applications that helped them find more Pokémon, which the Pokémon Go application restricted them from doing, as shown in the transcript excerpt below:

"There was this app called Poke finder on the internet so it would just say where all the Pokémons are and there was always one at like certain places around my block. So it would be like a few hundred metres away like in a few like a few like streets and stuff. And there was also at school as well. There was a park at our school, opposite our school and it would always have this one Pokémon that everyone wanted, then everyone just go there during their breaks because there's one there every five minutes, so even in class people got the chance to go and stuff. So in school, in parks and in the city as well, when I'd come to the city um because the city was packed and there were Pokémon everywhere." – R10

"When I'm at uni just chilling like, I taught all my friends how to do the hack and so we just chill out together like we'd all be on our phones playing Pokémon Go but technically it would be like somebody would be like at the wharf, someone would be like at Mission Bay. I think I travelled to Australia once using a hack, trying to find a Pokémon." – R9

# 4. 2. 3 Increased Social Interactions

Participating in Pokémon Go gave players the convenience of having a common subject with which to socialize with each other, make new connections, and build friendships with people outside of their circle who were also playing the game. The opportunity to socialize with new people and make new friends stimulated a sense of belonging to the real world. The transcript excerpts below make this clear:

"Yeah I have, I have. I met new people and I have made like really good friends through playing Pokémon Go." – R6

"I mean I met quite a lot of people doing it. And I mean I haven't seen them since but it was quite pleasant to spend your lunchtime socialising with strangers." – R5

"The thing I enjoyed most about the game was the social factor. So with that was the first real game that I've ever played that has a big social factor outside of the game. Because a lot of games have like tech, like voice communication and stuff like that where you can talk to people over the in, the internet, this was the first real game which was interactive in the real world because it was the first augmented reality app." – R8

Although Respondent 8 referred to Pokémon Go as being "the first augmented reality app", which it is not, he was aware that the elements of the game produced a new and innovative way to play the game where he was given the tools to be able to socialize in the physical world with other players outside the traditional realms of a virtual space.

#### 4. 2. 4 Bonding with Friends/ Family

Pokémon Go players who played the game with their family and friends were strengthening their bonds through playing the game together. Such bonding created a pleasant connectedness with friends and family as the game gave them something positive to do together, as the transcript excerpts below show:

"The main reason why I started initially just as something I could do with my brother or my girlfriend or with my family because I'm a big gamer myself so usually I just find myself at a computer and it's very anti-social. But now it's like a game that I can interact with my family, friends and it's like physical activity as well you're out walking and stuff like that so it's real good. It's an excuse to go out with my friends and play with my friends like usually when I'd be at home gaming myself I can now be like, hey do you guys want to go catch some Pokémon? Or go get a feed and catch some Pokémon and it's just an excuse to go out and socialise," – R8

"Because like my best mate was also on team Valour so I wanted to be like able to like go do battles and like with him instead of against him. Because sometimes I and Mike like would go out like have a smoke and then we'd randomly just jump in the car we'd like go drive around find a gym and then we'd go battle the gym and stuff. So that's what we used to do, this wasn't even long ago so um, yeah we'd just go for a drive at night and like go battle, like fighting Pokémon and shit, this is how bored we were. Um yeah so I jumped on Valour because all my friends were on Valour and then okay sweet so I'll just go on Valour." – R9

Participating in the game together encouraged players to spend more time with their friends and family, as playing the game together became a part of their daily routines, as the transcript excerpts below show:

"In the beginning it turned out to be a daily thing. Like me and my sister would, like I would get home and then at night we'd go, go around in our area and then that kind of just, yeah I just. We used to play every day." – R7

"It was like my friends because everybody played Pokémon so we used to go for like long drives catching Pokémon's and stuff like that, yeah. Especially on the weekends like whole day out with mates playing Pokémon Go. It was like a get together kind of thing!" – R6

#### 4. 2. 5 Pokémon Go Community

Players of Pokémon Go could clearly identify other Pokémon Go players in public if those other players were actively playing the game. Playing the game in public was similar to attending an event, as masses of people would gather at public domains playing together. The online world was also occupied by Pokémon Go news and social media groups dedicated to all things about Pokémon Go. The identification of other players in the public domain, as well as the reinforcement of the online world, stimulated players' sense of belonging to a 'Pokémon Go community'. The Pokémon Go community meant that players felt like they were a part of something bigger then themselves, as shown in the transcript excerpts below:

"There was a park at our school, opposite our school and it would always have this one Pokémon that everyone wanted, everyone just go there during their breaks because there's one there every five minutes, so even in class people got the chance to go and stuff. So in school, in parks and in the city as well, when I'd come to the city, um because the city was packed and there were Pokémon everywhere." - R10

"Well because no one in my company was playing it when I was at work I was by myself which was fine because I'd run into people on the street playing it and it became when I, when I would see them we would play together. So it was largely alone. But that was fine because it was part of like a community in itself so it would be okay to play alone and walk around, no one would judge you because they'd know exactly what you were doing." – R5

"Yeah, Mission Bay, oh we went there at 12 o'clock and there were so many people at night!! Everyone was like on their phones, this huge crowd and no one was like facing the ocean. Like I met some new friend like that." – R6

"Yeah, there was a lot of and Mission Bay was really popular. There were so many people playing Pokémon there. Like you would see people with their heads down on their phones walking around. It was crazy like we'd go there and we'd spent like a good like three, four hours there." – R7

"Because, yeah I started on the first day and then as people got into it the information started circulating, you know in tech social media going oh everyone's on this team it's so much easier. Facebook groups, I think there's a twitter or something as well, and there was like closed groups as well that you have to ask to be a part of, there was like tips and stuff." – R2

# 4.3 Theme 2 – Excitement

The second major theme that emerged from the thematic analysis is 'excitement'. Pokémon Go players' feeling of excitement about playing the game was mentioned throughout the interview transcripts. The notion of excitement and its fit within the player's internal drive and motivating force to play the game is defined by the excitement towards the novelty of the game (e.g., "innovative", "connected to real world", "imaginary", and "adventure") and the excitement created by the players' participation with the game (e.g., "challenging", "competitive", and "addictive"). The codes interpreted from the analysis and the way they fit within the overarching theme of 'excitement' will be explained below.

# Theme 2: Excitement



# Figure 6: Theme 2 Excitement

# 4. 3. 1 Game is Innovative

The participants mentioned the terms 'excited' or 'exciting' throughout the interviews when they were asked how the game made them feel. They were excited about the game due to the augmented reality aspect of Pokémon Go that provided a new and innovative way of game playing and which blurred the lines between the real and virtual world, flipping the script on traditional game play. The technology behind augmented reality made the players feel as if the Pokémon were present in the real world, which excited players, as shown in the transcript excerpts below:

"I used to play Pokémon as a kid and this is now something that brings Pokémon into your real life." – R5

Respondent 5 suggested the innovativeness of the augmented reality concept was "bringing Pokémon into your real life'. Further illustration of this idea is shown in the transcript excerpt below:

"I thought the concept was cool, it was just the hype, it was all about the hype at the time. I think the whole idea was something new so like the augmented reality, yeah, it was exciting." – R1

Respondent 1 thought the idea of the augmented reality was something new and exciting. Respondent 3 also shared a similar view:

"It was just something different. And I think the um, the fact that you could use the artificial reality, the camera to see the Pokémon um, that was quite cool. So it was just novel at the time." – R3

Furthermore, the physical component of the game also had a positive effect on players' enjoyment of the game:

"I like that it's interactive. That you have to do something like physical as well to sort of get ahead, yeah." – R3

"So because it's an augmented reality game, it tracks you in terms of your movements so it became addictive in terms I actually had to walk to go and achieve things in the game." – R5

While traditional mobile phone games do not incorporate physical activity requirements of their players, Pokémon Go does include this gamification component, which is an innovation in itself.

# 4. 3. 2 Adventurous

Pokémon Go requires players to be physically active (e.g., walking certain distances at different locations) to accomplish tasks within the game. The term 'adventurous', therefore, relates to players self-confessed description of how playing Pokémon Go made them feel when they were completing tasks within the game. That playing Pokémon Go was seen as a fantasy like adventure associated with the context of the Pokemon storyline is shown in the transcript excerpts below:

"I would say playing the game makes me feel adventurous, I would say engaged but like I would also use the word disengaged because I would be disengaged from the world going into that world. I like how it's using the real world in the game like the map situation because it makes you feel like the Pokémon is technically around you like, oh I'll go down Lorne Street because there's a crabby over there. I like that real life interaction there and sometimes I would pass shops and be like, oh yeah that's a poke stop. Yeah kind of blurring, I like that." – R2

"It became quite handy for me because I was working in the city so I had everything there and it was really convenient and it meant that I was more motivated to the city earlier in my day and start my day earlier so that I could walk around the city and I would find myself doing loops that I wouldn't normally do just so that I could go take down a gym or go to a lower or go to a Poke stop or whatever it was." – R5

#### 4. 3. 3 Competitive

A fundamental component of player participation with Pokémon Go was the factor of competitiveness between other players and their peers. The competitiveness was in reference to who could acquire the strongest and rarest Pokémon within their Pokedex (collection), taking ownership of gyms during battle, and who could level up the fastest. This competitiveness fostered excitement for the players to continue progression with the game. This is shown in the transcript excerpt below:

"Oh yeah just com, com, competitiveness, aye. Like I'd see my friends, yo I got this Pokémon I ran, like my friends would text and my friends would be like, yo I ran like three kilometres just to get this Pokémon and I'd be like, damn." – R10

Respondent 10 referred to the exchange of communication between his peers in respect of the effort exerted in completing game elements. The following transcript excerpt further elaborates on the excitement of competing:

"It made me feel really excited, like catching something! Like right away I have to get that kind of feeling yeah. I had, it was like I had to get more, higher level than my friends. It was like competing with each other but in a friendly way." – R6

Respondent 6 referred to an interesting element of the competitiveness factor, claiming that playing Pokémon Go with her friends was friendly competition. Respondent 7 (see transcript excerpt below) reinforced this idea:

"It was actually just the competition. Because there were these things called gyms and then you can go and battle them and you can own the gym, you can be part of the gym. So that's what my friends and I would do, I would look on the map and how many people are there and if, if we can take them because we were all on the same team, we'd go to that place and like to try take out that gym and try own the gym." – R7 Finally, Respondent 8 (see transcript excerpt below) reconfirmed the notion of competitiveness as a satisfying internal driver for engagement with Pokémon Go:

"You're competing with others as well so like if you see a gym you, you just took it over and you drive back home and another team just took it over so you want to go back and take it over again so, it's always like that competition so when there's that competition factor it feels like time goes by really fast because you're so immersed and so engaged in what's going on." -R8

### 4. 3. 4 Imaginary

The 'imaginary' code refers to the imaginative element of the Pokémon characters, providing Pokémon Go players with a sense of novelty from their past exposure to the Pokémon series, as shown in the transcript excerpt below:

"It was amazing, like it was just cool to have like pets and stuff because I used to love animals, well I still do but like having them like attack and stuff it's kind of weird like kind of barbaric, barbaric in a way but it was really awesome." - R10

Respondent 10 referred to the Pokémon characters as stimulating an exciting and imaginative element in his mind. Respondent 2 (see transcript below) further elaborated on this feeling:

"When I was young... What I felt about it? I got to the point where I wished Pokémon was real kind of thing, like with Harry Potter fans you wish it was real. When I got a bit older, I just liked the kind of, the collecting part of it, but when I was younger, it was kind of the imagination, and really getting engaged with the storyline and stuff." – R2

Respondent 2 stated her past exposure to Pokémon and how the imaginative element made her wish it was real life, Respondent 5 (see transcript excerpt below) also reinforced this idea:

"I was, obsessed with all of the monster based games, so even like Digimon I really liked that. And I guess it was a lot of the Japanese influence, I was really influenced by a lot of those animes so even things like Stellar Moon and all that I was really influenced by that. I think it was a combination of, like super powers but becoming personalized because they're your own monsters. Because that's what they are, they're pocket monsters, can fit these super powers inside your pocket." – R5

#### 4. 3. 5 Challenging

The 'challenging' code is relevant to the player's participation in the game. Players described a feeling of excitement when they witnessed Pokémon "pop up" around them that they could subsequently catch, particularly when it was Pokémon they had not yet caught. The challenge of finding Pokémon, which in-turn stimulated the feeling of excitement, motivated the player's to stay engaged with playing the game, as shown in the transcript excerpt below:

"Um, just being able to like catch like, cool Pokémon like um, like catching like, like the catching system was pretty cool, like when you get like eggs and you'd put it in an incubator and like then you'd wait for it to hatch and then you're like, hoping it's something amazing. Like I think I got a garrados once from an egg that I was like really happy with so I was like, yeah oh it's a garrados, and like that's like one of the strong Pokémon in the game so yeah." -R9

"Just when new stuff comes up, otherwise, it's a bit boring, it's frustrating when you get like 10 million zoobats but um yeah that's kind of it, when there's something new it's the only exciting part about it to me." - R1

The rarity of Pokémons caused players to find alternatives to the issue by downloading hacks to speed up the process, as illustrated in the transcript excerpt below:

"Um. So like I live in Papatoetoe so there's like crap Pokémon around in my area like, we only get like Ratas and Pigis and stuff so it was like rubbish um, so I then what I used to do was drive sometimes at night, like we'd just leave. And then we'd go like um towards Botany and stuff um, just go driving and then we'll try find stuff. So I taught all my friends how to do the hack and so we just chill out together like we'd all be on our phones playing Pokémon Go but technically it would be like somebody would be like at the wharf, someone would be like at Mission Bay. I think I travelled to Australia once using a hack, trying to find a Pokémon." -R9

#### 4.3.6 Addictive

The game occupied players' minds heavily during their time of involvement. Players became addicted to the elements of the game that excited them, for example increasing their points, collection of Pokémon, and levelling up. On average, players spent 10 hours a week playing Pokémon Go during the peak of their participation with the game, and on average these

players spent three months playing the game. The transcript excerpt below provides an illustration of involvement:

"I would check my phone a lot, like, I wouldn't stay on it heaps, but I would check it all the time, I would say like maybe three times an hour or something. I would just always check it. It's a little addictive because I wanted to catch them all but um, yeah it was just kind of addictive, I don't know what else to say." – R1

"It's kind of like you get addicted to finding the new Pokémon especially. Um, I'm not really how else to describe it um. It's fun. And it's sort of, you can easily get distracted I think with it." – R3

"I think there was a notification but it wasn't that that was triggering me, it was more that it became addictive and it really did become addictive in terms of your continually gaining points and you're continually reaching different levels so you're always wanting to increase." - R5

### 4. 3. 7 Connected to the Real World

Players described feeling a sense of realism in relation to catching Pokémon, a blurring of lines between the real world and the animation of the characters within the game. Players felt like the augmented reality aspect of the game brought the Pokémon characters into their real lives, as shown in the transcript excerpt below:

"looked a lot better when they were advertising and stuff yeah like it felt, it was a real kind of thing, it's like your actually catching Pokémon." – R1

"I like how it's using the real world in the game, like the map situation because it makes you feel like the Pokémon is technically around you like, oh I'll go down Lorne Street because there's a crabby over there. I like that real life interaction there and sometimes I would pass shops and be like, oh yeah that's a poke stop. Yeah kind of blurring, I like that." – R2

# 4.4 Theme 3 – Nostalgia

The third theme that emerged from the thematic analysis is 'nostalgia'. The intrinsically based construct of nostalgia is manifested by two codes found within the data: (1) a prior fan of Pokémon, and (2) memories of childhood (see Figure 4.4). The components that make up nostalgia and their relevance to the research question are explained by the network of associations within players' minds relative to a wistful mood prompted by memories of

Pokémon from their childhood. It is the emotions or feelings attached to a player's dear departed past that instigated an emotional experience when participating in Pokémon Go.

# Theme 3: Nostalgia





# 4. 4. 1 Prior Fan of Pokémon

The 'prior fan' code indicates that the player was an original fan of Pokémon before playing Pokémon Go, as shown in the transcript excerpts below:

"I was a fan to start with um, I was just a huge fan really." - R1

"Pokémon was my all-time favourite TV show, I watch the TV religiously as a kid, I played the Gameboy game, I collected the cards, yeah I was really into it. I was an only child so it was a really kind of easy thing to occupy myself with cause of the games. Yeah I suppose I was a fan. I saw myself as a like I was an OG fan, like an original fan, but then I feel like I kind of betrayed it because I stopped playing so soon but yeah no I was attached to it when it first came out and I thought it was a great game." – R2

"Um and I was pretty, pretty diehard fan of Pokémon, yeah. Oh so passionate about it I used to collect everything, the little toys, the trading cards everything yeah, I used to have the game on Game Boy yeah." - R8

Evidently players had a strong affinity towards the Pokémon brand stemming from their childhood exposure to the series and its other counterparts.

#### 4. 4. 2 Memories of Childhood

This code refers to players reliving memories from their childhood whilst playing the game, taking players on an emotional journey back to their childhood. The transcript excerpt below illustrates this:

"It was nostalgic it was, the most amazing feeling to be reliving um, reliving my childhood again but at the same time it was making me realize that I'm grown up as well so nostalgic and realistic in a way. But yeah. like I focussed on like memories and like stuff of watching Pokémon as a kid and stuff and like what really made me love it and stuff and yeah but like it was just yeah." – R10

The popular catch phrase behind the storyline of the Pokémon brand "*gotta catch them all*", and the concept of becoming a "*Pokémon Master*", played its part in facilitating nostalgia and the motivation to participate in the game, as shown in the transcript excerpts below:

"Yeah as a kid me and my brother used to. So he's, five years older than me. My sister's six years younger than me. So she didn't know the actual series; whereas me and my brother used to watch it um, and that just kind of reminded me of I don't know, my childhood. Yeah and like all the Pokémons you'd see on TV you'd be like you can catch them and stuff I don't know." – R7

"How does it make me feel? Um, kind of feel like a kid again, yeah like it's like got to catch them all sort of thing so it sort of actually makes me feel like a kid." - R3

The network of associations within players' minds relative to their childhood and Pokémon were sentimentally positive. Players played Pokémon Go as a type of encore for those memories, as shown in the transcript excerpts below:

"When I was young... What I felt about it? I got to the point where I wished Pokémon was real kind of thing, like with Harry Potter fans you wish it was real." – R2

"Yeah so, I, I started playing because I guess it was a bit of a nostalgia thing as well just sort of Pokémon's back and there was hype again. And when I get those feelings that I got when I was a child and once you started playing like I used to play the Game Boy game and every time you level up it's like instant gratification, you feel good about yourself and you feel good you've achieved something. But I guess there was a sense of that when I was playing the Pokémon Go game. I'd catch a Pokémon feel good, I'd level up feel good." – R8

#### 4. 5 Theme 4 – Flow State

The fourth theme is 'flow state'. Flow state manifested itself through only one code in the data analysis, that is, loss of self-consciousness. The development of flow, its interpretation through loss of self-consciousness, and players participation with Pokémon Go is explained below.

# 4. 5. 1 Loss of Self-Consciousness

Loss of self-consciousness refers to a player's self-identified unawareness of the time whilst playing Pokémon Go. The players expressed getting lost in the game play, losing track of time, and becoming disengaged from the real world and immersed into the game play. This is illustrated in the transcript excerpts below:

"Sometimes like when we used to leave for our drives and stuff, used to be like really late at night it because like, first I used to get home like at 8, my mate would come over. And then we'd go out and we'd have a cigarette and then we'd decide to like go out and you know go Pokémon hunting. And then like we'd like go hunting for a while and then we'd look at the time on my phone and oh crap it's like almost 11 we'd better go back. So yeah, you do lose track of time like yeah." – R9

"No, no, I'm not at all aware of the time while I'm playing, like my friend, I mean my family had to call me up saying aren't you supposed to be at home?! Get back home!" – R6

"It was actually quite time consuming because you don't actually realize how much time goes by because you're so immersed in the game and you're so um, like you're, you're competing with others as well so like if you see a gym you, you just took it over and you drive back home and another team just took it over so you want to go back and take it over again. So, it's always like that competition so when there's that competition factor it feels like time goes by really fast because you're so immersed and so engaged in what's going on." – R8

# 4. 6 Theme 5 – Killing Time

The fifth major theme established from the thematic analysis is 'killing time'. The simple and intrinsically driven construct of killing time was manifested through one code, which is getting rid of boredom. The development of this theme is explained below.

#### 4. 6. 1 Getting Rid of Boredom

Players initiated participation with Pokémon Go when they felt they had time to kill (e.g., during travel or wait times). Playing Pokémon Go provided players with something to do

either socially or alone, and it was a distraction per se when they felt a disassociation with their timely reality, as shown in the transcript excerpts below:

"I played every day, pretty much on the way to work and back home, and if I had to go anywhere else like to the gym or supermarket, like when I was standing in a queue basically I'll play, like a time filler." – R2

"Yeah like when I have time I just, I'm like on my phone playing like a lot. I only play games when I'm extremely bored. And I think I was really bored last year" – R6

"It's pretty much all I did during my break at uni. Um back then, yeah just chill out play Pokémon Go, go for a walk or um. I had a little cheat which had like a GPS tracker so you could move yourself without actually going for a walk so we just used to sit in my room, like sit at uni and then like I'd be like at Mission Bay or something catching Pokémon even though I wasn't actually in Mission Bay. So yeah." – R9

# 4.7 Theme 6 – Accomplishment

The last theme defining the motivation to play Pokemon Go is 'accomplishment'. Accomplishment was manifested in two ways. The first way was through the desire to gain power and progress rapidly, which is coded as reward by reaching higher levels, and the second was from accumulating in-game symbols of wealth and status, which is coded as reward by collecting Pokémon (see Figure 4.7). The interpretation of these codes and how they construct the overall theme of accomplishment is explained in the following sections.



#### **Theme 6: Accomplishment**

#### Figure 8: Theme 6 Accomplishment

#### 4. 7. 1 Reward by Reaching Higher Levels

The first code relevant to players' felt sense of accomplishment is the intrinsically rewarding gratification of progression. Progression to a higher level within the game implies that the player will acquire new skills and power as a reward for succeeding in missions or quests within the game. This intrinsic achievement for players was a motivating factor for continued participation, as shown in the transcript excerpts below:

"I think there was a notification but it wasn't that that was triggering me, it was more that it became addictive and it really did become addictive in terms of your continually gaining points and you're continually reaching different levels so you're always wanting to increase." – R5

The mitigating factor of accomplishment was the competitiveness of the game. Players described their motivations for continued participation with Pokémon Go as competition within their peer groups, as shown in the transcript excerpt below:

"When we did play it um, I was just trying to get better and like compete with my friends because like I have a mate who still plays. And he's but I think he's like one of the best in New Zealand." – R9

Reaching higher levels within the game was both goal-directed and experiential as players felt stimulated to gratify their intrinsic need for achievement through progression, as illustrated in the transcript excerpts below:

"So initially made me feel um, real quite happy, um and a sense of achievement, um because every time I would level up or catch a Pokémon and also I don't know the word but I would say the nostalgia I guess." – R8

The effect of progression also occurred when players carried out the physical task of walking around in search of Pokémon within the game. This gamification element within the game enabled players to progress to new levels, which provided a sense of accomplishment, as shown in the transcript excerpts below:

"So because it's an augmented reality game, it tracks you in terms of your movements so it became addictive in terms I actually had to walk to go and achieve things in the game. I think that was rewarding because I had to physically walk to go places to actually get benefits from the game." – R5

#### 4. 7. 2 Reward by Collecting Pokémon

The central feature of playing Pokémon Go was the collection of Pokémon. The game required players to collect different Pokémon varying in strength and skill, which would appear at different geographical locations at different times, and they could then use the Pokémon they collected to battle. The element of collection was primarily the most competitive task of the game for the players as the search for the strongest and the rarest Pokémon dictated the way they could progress within the game. The accomplishment felt by players in regards to collecting Pokémon was not only about the competition but also the nostalgia felt by players who had a prior affinity to Pokémon from their childhood. When players were able to catch new Pokémon within the game, they felt an instant sense of accomplishment, as illustrated in the transcript excerpts below:

"It made me feel really excited, like catching something! Like right away I have to get that kind of feeling, yeah." – R6

"When it was Halloween, they had a Halloween theme and that was interesting because you could get, so there's like um, the ghost Pokémon and water Pokémon and all of that. So around Halloween time there was the ghost Pokémon and that was stronger. So that, that was like a hype to go get the strongest Pokémon around your area and there were lots of unknown ones that you hadn't really got. So that was, like if they did things like how they had like around Halloween time then it would encourage people to play it." – R7

Respondents 6 and 7 mentioned that the excitement for the game was built around the element of finding new Pokémon, which encouraged players to continue participating in the game. Players also mentioned that the nostalgia factor of catching Pokémon was intrinsically rewarding, as illustrated in the transcript excerpts below:

"I think that it's just to do with the collecting thing, it's like an obsession; you want to collect them all or whatever. And it's just like a self-satisfaction thing." -R2

Players further noted their obsession and addiction with finding new Pokémon, which was also a rewarding aspect of the game play, as shown in the transcript excerpts below:

"Collection yeah, it became really addictive especially when you could figure out where ones you don't have belonged. So it made you more motivated to actually go out and walk that bit further to try and capture." -R5

# 4.8 Theme 7 – Stopped Playing Pokémon Go

The final major theme to come out of the data analysis is 'stopped playing. This theme explains the short-life span of the Pokémon Go hype. All 10 of the participants for this research study were recruited under the condition that they had been highly engaged players of Pokémon Go around the time of the game's release. When this research was conducted, months after the game's release, all 10 of those participants indicated that they had stopped playing the game and that they would not be playing the game again. The theme 'stopped playing' is manifested by 14 codes which are categorised into six sub-themes (see Table 7). The sub-themes derived from the data analysis (e.g., 'social influence', 'game features', 'technical issues', 'not worth the effort', and 'other factors') are categories that explain overall why players stopped playing Pokémon Go. The codes that fit within these categories and how they form the overall sub-themes and overarching theme are explained in the following sections.

Theme 7:	Sub Theme:	Codes:		
Stopped	Social influence	Other people stopped playing		
Playing	Game features	Restricted Pokémon sightings		
		No locating system		
		Can't change teams		
		No interaction with Pokémon characters		
		Not challenging enough		
Technical issues		Server was glitchy		
		Drains battery and data		
	Not worth the effort	Work exceeded reward		
	No more novelty	Repetitive		
		Game was boring		
		Noting new		

 Table 7: Theme 7 - Stopped Playing

# 4. 8. 1 Social Influence

The first sub-theme to come out of the data analysis in regards to theme seven, is the notion of social influence. Social influence was manifested through one open code which is 'other people stopped playing Pokémon Go'. Other people stopped playing refers to the idea that if all of a players' friends and family stopped playing, then that player had no reason to play anymore, thus the reference to the socially influenced decision to stop playing. The interpretation of this code and development of the social influence category is discussed below.

# Code 1 - Other people stopped playing:

The first code identified under the finding that players stopped playing Pokémon Go due to the social impact of the depreciating participation of Pokémon Go players, identifies a domino like effect with the game losing its players due to a loss of interest which spread amongst peer groups, as shown in the transcript extracts below:

"I thought I just wanted to try it out um, I didn't turn out to be a big fan of it and I just kind of kept playing because everyone else was, I don't know, it was kind of something to just kill time and eventually it just didn't have any interest anymore." – R1

"I would play it again. I don't know, everyone just stopped talking about it so I just stopped playing it. And no one was really playing it so I just, yeah. If people still played it I would have still played it." - R7

"Ah because they've changed it too much now and I think the good thing about playing it before was that there was so much of a social, social like, player base that I knew of and now that, that's gone. Because I guess now that the audience is a lot younger like the you know, little kids who are going to parks and stuff like that with their parents. Um, whereas before it was our, the millennials, you know it was us. Yeah so, nah, no longer." – R8

The perception of other people playing the game had a huge social influence on whether participants continued their participation with the game, as seen from the transcript extracts above.

#### 4. 8. 2 Game Features

The second sub-theme to emerge from the finding that players stopped playing Pokémon Go concerns the game's features. The game's features are manifested by five open codes which were antecedents for players losing interest in Pokémon Go, thus not playing anymore. The five open codes are namely, (1) restricted Pokémon sightings, (2) no locating system, (3) can't change teams, (4) no interaction with Pokémon characters, and (5) not challenging enough. The development of this sub-theme, the interpretation of its open codes, and the overall fit within theme seven are explained in the following sections.

#### Code 2 - Restricted Pokémon Sightings

The first code relates to the game's feature whereby players had to hunt and locate Pokémon at different geographic locations. Originally, upon Pokémon Go's release, there were no restrictions in the way players could find Pokémon; however, in regards to the controversial freedom players had in the way they could play the game (e.g., whilst driving), the developers of Pokémon Go enforced a new algorithm which stopped players from being able to play the game if they were traveling at a fast speed. Because of this, players were unable to find, collect, or battle Pokémon if they were trying to play whilst moving at fast speeds. This therefore provided less opportunity for players to play the game during their travel times, as Pokémon characters became harder to find, consequently leaving players less enticed to play. This issue is highlighted in the transcript excerpt below:

"Like, because in the game, Pokémon are meant to pop up, so I would just open it to see if there's anything around, if there's nothing there, I wouldn't go out of my way and like walk around and look for it like if it's in the area then yeah" – R1.

"They started bringing out rules and stuff, so how I used to play, let's just say for example if my boyfriend was driving it was okay, sweet it's my turn to play but now you can't play in the car anymore. Nothing shows up, you can't go through any Pokémon um stops or anything while even in a car even if you're a passenger and it keeps coming up with all these pop ups and it was just annoying so I just stopped playing." – R7

Respondents 1 and 7 mentioned an unwillingness to exert extra time and effort on locating Pokémon. Interestingly enough, all the players interviewed mentioned that most of their participation in the game was during their travel times, clearly before the new rule came into play, as shown in the transcript excerpts below:
"One sitting? The longest time I would play would be on the bus ride home, which is usually about an hour. Hour and a half maybe if there was a lot of traffic. Just because the bus would go through multiple locations so I could get a variety of Pokémon. Yeah, yeah. So that was the main time." – R9

The change of rules for the game became a missed opportunity for Pokémon Go and its avid fans who were playing the game during their travel times. Some players mentioned downloading hacks, which enabled them to find and capture Pokémon that were out of their physical reach in order to avoid the extra time and effort needed to participate in the game play. Conversely, Pokémon Go's developers managed to block such cheats, as discussed in the transcript excerpt below:

"Everyone started using the online Poke finder app which was like it would just show you where the Pokémon was born and stuff and ever since that and then after that website got banned, that's why everyone started playing less, because there was no like proper way to find Pokémon so they just made the game difficult. And when it's difficult and like not as like interesting, it just gets boring and you just like, like slowly give up on it." - R10

## Code 3 - No Locating System

The third code related to the game's features as an antecedent for why players stopped playing Pokémon Go, was to do with the way that Pokémon could be located. The Pokémon locating system on the game was perceived as insufficient for some players, therefore making the lazier players less likely to play, as illustrated in the transcript excerpts below:

"I wish there was more like hints rather than just walking around like a zombie like trying to look for stuff. I think they should just introduce more stuff." - R1

"At first there was, I think there was a grade where you'd only get Pokémon like at certain places. And it was, it was pretty difficult. There's no system to like show you like a proper coordinate system to show you how close the Pokémon was. And there was like there was but it was really vague and like imprecise yeah. But yeah. So if you had a system like oh if you like, I guess like if I can like an easier step system would be easier but yeah I don't know." – R10

Players noted that had there been a simpler system that gave them some clues as to where they could locate Pokémon, it would have made them more likely to play. The nondevelopment of this feature resulted in impatient players who felt like playing the game autonomously incurred too much of a delay.

## Code 4 - Can't Change Teams

The fourth code relevant to the finding that players stopped playing is the game feature that meant players were unable to change the guilds to which they belonged within the game. Players had a choice to join one of three teams within the game upon their initial participation. Once players chose their team, they were unable to change. This technicality affected player engagement as there was a perception that some teams were stronger than others. This meant that if you were on a weaker team, your progression within the game would be slower, as pointed out in the transcript excerpt below:

"I belonged to the red or the fire team in the game, the red one, yeah. I know that it was a weaker one and I know that I should of gone with the blue one because I think that there are more gyms that are that or something, so yeah I didn't really get fully into it because I was in a weaker team because of it. Once you choose you can't go back. So yeah, the team wasn't a huge factor, but it stopped me from going to the gym, which was a key factor in moving forward." – R2

## Code 5 - No Interaction with Pokémon Characters

The fifth code relevant to why players stopped playing Pokémon Go was another game feature, whereby players wanted to be able to interact with the Pokémon characters more during their game time. Players could catch, collect, and battle Pokémon; however, they were unable to interact with the characters more fully, as pointed out in the transcript excerpt below.

"Yeah, like it just wasn't like that fun anymore like there was no, like because when all you were doing was catching Pokémon you weren't like interacting with anyone else during that time, you weren't like. It was just more like a collection game aye, like you just collect them you wouldn't like do anything with them. You couldn't like travel with them you can't chase them but like, yeah." – R10

## Code 6 - Not Challenging Enough

The sixth code was manifested by the motivation to stop playing Pokémon go based on the game's battling feature, which was considered by players as not challenging enough. Players expressed their disappointment with the lack of strategy involved in playing Pokémon Go

compared to previously released Pokémon hand-held games. The element of battling within the Pokémon Go game was player versus server based, meaning players could not interact with the game and their fellow players to any great extent, as the challenge was less strategic than a player versus player-based game. Players felt the Pokémon Go battling feature was disconnected from the original storyline of the series in terms of the way Pokémon and their masters battled. Moreover, they felt that the original Pokémon games available on hand-held devices involved more strategy in the battle, as shown in the transcript excerpts below:

"The gym battling um, is like so, their battling system is really flawed I reckon, it's dumb. Um it's nowhere near like the video game like on the um handheld consoles, it's really different. And but the thing is you can't battle anyone else who plays the game. You have to just battle on the gym. So you don't actually know who you're battling. So you're just trying to take on a gym. And like plus you're not battling another player you're just battling their Pokémon, they're just being sat there so a CPU is controlling them rather than a player. It's just, it, it's really different compared to how the handheld games work." – R9

"The main thing with Pokémon is using your partner as a Pokémon and like and like battling others and like whoever's the best. And that was the real competition like, but then there was nothing like that with, nothing like that sort in Pokémon Go. And the only way you could play with your friends was just walking around and trying to catch the same Pokémon which was, it was fun for like a bit but then it would just get boring. It wasn't like the, the game and like compared to like, like the games on like Nintendo and stuff it was like, it was like really different and it was having, you could just see the difference and it wasn't like, it wasn't fun anymore because it was just like just walk around, and if you're lucky you get like a random Pokémon pop out and just catch it but there was no like, there was no like the way that you could like actually play the game strategically." – R10

### 4. 8. 3 Technical Issues

The third sub-theme category to come out of the data analysis regarding why players stopped playing Pokémon Go is technical issues. 'Technical issues' refers to two codes by which it was manifested: the game's server was often glitching and the game itself drained players' device batteries and data. The interpretation of these codes and how these technical issues influenced the overall theme of players not playing Pokémon Go are explained in the following sections.

### Code 7 - Server was Glitchy

The seventh code belonging to the reason players stopped playing Pokémon Go is a technical issue based on the server and its defects. This technical error with Pokémon Go clearly affected player's intentions of continuing to play, as players expressed frustration over the game server constantly crashing and giving imprecise GPS signals of where the Pokémon were located, as shown in the transcript extracts below:

"At the beginning, it was real glitchy, so like I would be walking down this particular area and it says that I'm walking somewhere else? Like it was just the GPS was bad, but I don't know if that's just to do with my phone or not." – R2

"They didn't see the effect that it was going to be so popular coming and it would keep crashing and so the server would be down. And so I'd have eggs on the go and I'd be walking to try and hatch them and then the server would crash and that would wipe all my data. So because of the server issues and just the development of the game, the development itself was really limited so there was a lot of bugs and a lot of errors." – R5

"It was quite buggy to be honest, sometimes. Like it was glitching a lot like you'd see a Pokémon and you'd go there and you'd try click it but it wouldn't click. And then it would disappear and you'd just get frustrated because you know, sometimes you, you, there's no Pokémon in your area like where I stay in my house so when I find one it's like pretty rare, so obviously want to try and catch it. So just a sense of frustration as well yeah." - R8

## Code 8 - Drains Battery and Data

The eighth code relevant to why players stopped playing Pokémon Go is another technical issue. The players felt playing the game was financially too costly for them in regards to battery life and data, as players required a mobile device and an internet connection to play. According to the respondents, playing the game drained more battery life and data than they were happy with, as highlighted in the transcript excerpts below:

"I played a lot yeah, but, I go to time like I was in like I don't have that much data. So like because of that I'd like play it, it just decreased gradually." – R10

"There was nothing really changing in the game. So, like it kind of lost interested. I'm like I'm doing the same thing again and again and I don't even know if I'm going to catch like the most rare Pokémon. Yeah, then it to even more annoying when I saw my phone bill. It as the data use I was like crap." – R6

"Yeah and just takes so much data. And the battery just dies instantly. And so that was another thing like with battery usage and the data usage is ridiculous so I stopped because I couldn't afford that much data." - R7

## 4. 8. 4 Not Worth the Effort

The third sub-theme to come out of the data analysis relevant to players no longer playing Pokémon Go is that players found the game to be no longer worth the effort. This idea is made up of one code, that is, the work players undertook to participate in elements of the game exceeded the reward. How this sub-theme and its code fit within the phenomenon of players no longer playing is explained in the following section.

### Code 9 - Work Exceeded Reward

The code of 'work exceeded reward' is relevant to players who began to lose interest in Pokémon Go and felt that the amount of tangible resources (e.g., physical activity, money on data, and time) they had to give to the game did not match the intrinsic rewards produced by the game, as shown in the transcript extracts below:

"Yeah like it like, in the beginning I like, I didn't like, it didn't matter how much time I spent. But then over time I was just like, is this game really worth it? And I was like, I just looked at downloads, oh I'll just finish off like in a minute or because you're not really, it's not really that fun anymore." - R10

"But eventually I increased so quickly that the amount of work I was putting into it, I wasn't receiving as many benefits and that's when I stopped playing because I got up to quite far for that time and then I was not at the top levels but I was near the top and then I gave up because it got boring after a while. Yeah." – R5

Players expressed frustration with the features of the game as well as the technical issues of the game which affected their motivation to engage with the game. There was no longer any intrinsic reward stimulating them to play and therefore they lost interest and stopped playing the game.

### 4. 8. 5 No More Novelty

The fourth sub-theme to come out of the data analysis relevant to why players stopped playing Pokémon Go is that the game lost its novelty. This sub-theme is manifested by three codes, namely (1) that the game became repetitive, (2) the game was boring, and (3) that there was nothing new in the game that kept players interested enough to keep playing. An interpretation of these codes and the description of how they relate to a loss of novelty causing players to stop playing is provided in the sections below.

## Code 10 - Repetitive

The repetitive code, related to a loss of novelty that caused players to stop playing, is related to the underdevelopment of Pokémon Go. The players felt that the game was too repetitive in terms of producing excitement. Players identified that if they did not travel to new locations in search of Pokémon, they ended up with the same types of Pokémon over and over again, as highlighted in the transcript excerpts below.

"Um, I think, after like reaching a certain level, there was nothing new really. It was just the same old, um catching the Pokémons, getting points al stuff like same thing. It wasn't like different really so yeah I just stopped playing after that." – R6

"I guess like I stopped because I found it really boring after a while, it was just quite repetitive. Like the hype died down, people stopped playing. You know people, it got quite repetitive, people started catching most of the Pokémon and you could only find specific Pokémon in specific areas and people didn't want to go out into those areas and find, find those Pokémons. Yeah, it became inconvenient because I mean, I didn't want to be doing the same thing over and over and over. There was no excitement anymore." – R8

## Code 11 - Game was Boring

The eleventh code, an antecedent to loss of novelty, was expressed as boredom with the game. The players' boredom with the game was a mitigating factor for not playing the game anymore, as highlighted in the transcript excerpts below.

"it was pretty boring, there wasn't much too it. It was just you like catch Pokémon and then you don't really do much, there isn't much do the game, it's kind of boring. At this point in time, I will definitely not play Pokémon Go again. It's just boring to be honest, there's nothing fun about it." – R1

"I guess like I stopped because I found it really boring after a while. It was just quite repetitive." – R8

"Well I started playing sort of played for like about, 2, 2 and a half months. And then it's kind of died off. So like everyone's kind of like got bored of it." -R9

Players expressions of boredom with the game related to all the codes identified within the overarching theme of 'stopped playing', explicitly attributed to a loss of novelty.

### Code 12 - Nothing New

The code 'nothing new', similar to the code 'repetition', distinctively refers to the players' thoughts in regards to the development of the game and its lack of provision of any new elements to keep players excited enough to continue to play. The lack of new and exciting gaming elements caused a loss in novelty with the game, therefore contributing to the phenomenon of players no longer playing, as highlighted in the transcript excerpts below:

"I wish there was more like hints rather than just walking around like a zombie like trying to look for stuff. I think they should just introduce more stuff." - R1

"Um, I think, after like reaching a certain level, there was nothing new really it was just the same old, um catching the Pokémons, getting points al stuff like same thing. It wasn't like different really so yeah, I just stopped playing after that. Definitely it was nothing new, it was just the same. There was nothing really changing in the game. So, like it kind of lost interested. I'm like, I'm doing the same thing again and again and I don't even know if I'm going to catch like the most rare Pokémon." – R6

The slow introduction of new elements within the game caused a loss of excitement for players which resulted in a loss of players.

### 4.8.6 Other Factors

The final discovery to arise from the data analysis in regards to why players stopped playing Pokémon Go is established by two codes which do not fit in any particular sub-theme category. However, these codes provide valuable information regarding the major theme of why players stopped playing, and affected their sustained participation with Pokémon Go. The interpretation of these codes and their importance to the research are explained below.

### Code 13 - Overpromised in Trailer

The first uncategorized code is related to the misrepresentation of the Pokémon Go game, which was expressed through a Pokémon Go trailer (advertisement) released one year prior to the game's release. This trailer excited potential players who had a prior affinity to the Pokémon brand, as it set high expectations regarding the innovativeness and popularity of the game. The technology and game features that Pokémon Go was released with did not match those initial expectations. The expectation was that the Pokémon characters would be projected into the real world through holographic imaging; however, the game used augmented reality to project the Pokémon characters on player's phones through an image overlaying the natural environment. Those players who saw the trailer prior to playing the game felt disappointed with what they got out of the game as they expected a different kind of technology as portrayed within the trailer as well as other game feature capabilities. This expectation was not met, thus causing players to feel unmotivated to play, as shown in the transcript extracts below:

"Because okay, when I saw the trailer like um two years ago in 2015 they made it seem like they, they made it seem like it was virtual reality where like over here it was all on the phone. Whereas the way they saw that you could see Pokémon like through your phone like everywhere like in the run and you could but there was no like, you felt that there was a sense of realism and that's what attracted like most of the people who played Pokémon Go before the game came out because, like as a kid you're like walking around and you were like thing and then like see a Pokémon pop up and stuff and then like seeing them pop up it excited them and made them go watch and stuff. That's what created all the hype and stuff. But like after people realized it wasn't what it was made to seem like, it wasn't virtual, it was just another game on the phone, just like Google Maps. So I think that's why I like, I don't know yeah. that's why like what made me want to play the game. But then just realising what, like what it actually was like decreased the interest." – R10

"When I heard about it, I thought it was true, like a virtual reality thing, because I saw the ad for it and I got sucked into it! And like I don't know why I thought this, but I thought the phone like projected the Pokémon to be in front of you or something? But yeah, it makes sense that it's on the phone. This was like to do with my childhood, like you know my interest in it." – R2

The mismatch of expectation versus the reality of the game caused players to feel disinterested with Pokémon Go and thus they stopped playing after a few short months.

#### Code 14 - No Prior Affinity

The final code relevant to why players stopped playing Pokémon Go refers to players who were disengaged with the game from the start. These disengaged players pointed out that they had had no prior affinity to Pokémon from their childhood. They could recall the series on television, however they explained that they could not regard themselves as fans. This code therefore represents the idea that players who had no prior Pokémon Go fandom were highly likely to stop playing the game anyway under these circumstances, as shown in the transcript excerpts below:

"Um like yeah, I knew what Pokémon was when it came on TV but not, I wasn't like obsessed with it, it's just like, oh it's Pokémon. While I was playing I was still learning, learning like Pokémon names and something like that because I still don't know all the Pokémon's yeah. Like I played for when it was really popular in the beginning but I stopped after like 2 months or so." – R6

"I wasn't that much of a fan. I actually wasn't. I used to watch it because my brother liked it and we only had one TV so, I used to watch it with him. Pretty much yeah, whatever he'd watch on TV I'd watch with him so that's just how it always was. Hmm yeah, I never, I never, I wasn't really into it. The same with Dragonball Z, like I'd watch it but I wasn't really that much into it. But I've stopped playing after a few months." – R7

The significance of this code is that to an extent it is mirrored by the motivation for playing being nostalgia. Those who did not express nostalgia, as the above transcript excerpts show, were more likely to stop playing the game than those players who were exhibiting nostalgia.

## 4.9 Conclusion of Findings

This chapter presented a summary of the seven major findings discovered through the thematic analysis. The seven major themes come together to form a theoretical framework that establishes the causal effect of motivations to play Pokémon Go, what sustained player engagement, and finally what factors contributed to the players no longer playing Pokémon Go. How this theoretical framework fits within the existing body of knowledge and the implications of these findings on the body of knowledge are explained in the following chapter.

# **Chapter Five – Discussion**

## 5.1 Introduction

The purpose of this research was to identify what motives drove Pokemon Go players to play the augmented reality mobile game, investigate what sustained these players' ongoing participation with the game, and explore the reasons/motives that caused Pokemon Go players to stop playing the game. Upon conducting this study, it was found that the player motivations to play Pokémon Go, which supported sustained ongoing participation, had become obsolete. Due to this finding, the Pokémon Go phenomenon can now be explained as a fad. A fad is essentially a short-lived enthusiasm that entails a rapid incline of popularity and a just as rapid decline of popularity (Best, 2006). Usually in the adoption faze of a fad, relatively few people are involved. These initial adopters may all belong to a common subculture, and the fad then trickles across (Solomon, 1994). In the case of Pokémon Go, the initial adopters were the nostalgic millennials who were prior fans of the Pokémon brand during their childhood.

This chapter will elaborate the underpinning of what motivated players to play Pokémon Go, as well as offer the latent account of what sustained player participation with the game originally. What caused Pokémon Go players to stop playing the game is also explained. A theoretical explanation of how the findings from this study relate to the existing literature on gaming motivations, and the implications of this study for the body of knowledge, will be discussed in the following sections of this concluding chapter.

# 5. 2 Theme 1 – Sense of Belonging

The first major theme that emerged from the thematic analysis was a *Sense of Belonging*. The theme is composed of five categorical codes: (1) *Social Influence*, (2) *Fear of Missing Out*, (3) *Increased Social Interactions*, (4) *Bonding with Friends or Family*, and (5) *Pokémon Go Community*. The underlying meaning of *Sense of Belonging* and the relationship to its defining codes are all interlinked concepts that help to define a player's motivations for playing Pokémon Go and what sustained their ongoing participation.

Fundamentally, a sense of belonging is defined here as the nature of interpersonal connections and perceptions of those relationships that affects a person's social and psychological functioning (Maslow, 1954). The effect that this had on player's motivations to play Pokémon Go was positive as players were able to establish and maintain relatedness to

others playing the game. Relatedness refers to a sense of belonging; the nature and quality of a person's relatedness to others influences behaviour and promotes or impairs their health (Hagerty, Williams, Coyne, and Early, 1996). The findings of this study did not go beyond a sense of belonging, but instead touched on aspects of relatedness through belonging.

Belonging has long been noted in the literature as a basic human need (Maslow, 1954; Thoits, 1982) through which a person feels themselves to be an integral part of a system or environment in which they have a personal involvement (Hagertly, Lynch-Sauer, Patusky, Bouwsema, and Collier, 1992). The attributes of a sense of belonging include the experience of being valued, needed, or important and the experience of fitting in or being congruent with other people, groups, or environments with shared characteristics (Hagertly et al., 1992). Antecedents to a sense of belonging are an individual's energy for involvement, a desire for meaningful involvement, and the potential for shared characteristics from that involvement (Hagertly et al., 1992). Consequences of a sense of belonging include involvement (physical, social, or psychological), attribution of meaningfulness to that involvement, and establishment of a foundation for emotional and behavioural responses (Hagertly et al., 1992). Sense of belonging has also long been noted in the literature as a motivation to play video games (Huang, Yang, and Chen, 2015; Banyte and Gadeikiene, 2015).

The codes of social influence and the fear of missing out (FOMO) encompassed within the concept of sense of belonging in this study, relate to players perceptions of belonging. Perception is referred to in the sense that players' involvement with the game was related to the experience of potentially fitting in with other players of Pokémon Go. The viral spread of word-of-mouth communications relevant to the game at the time of its release facilitated a social contagion that players felt they could identify with. The fact that we live in a socially embedded world (Burt, 1987) and we influence and are influenced by others demonstrates how word-of-mouth and peer influence diffused so quickly for Pokémon Go. Social contagion occurs when people use one another to manage the uncertainty or risk of adopting a new innovation (Burt, 1987), such as Pokémon Go. Thus, the positive word-of-mouth communication that spread virally for Pokémon Go facilitated the social contagion for the game and the social influence to play, as well as the subsequent FOMO. The social contagion allowed players to perceive that the benefits of adopting the game outweighed any risks and encouraged their motivation to fit in.

Fitting in relates to how we present ourselves to others. The fear of missing out is a pervasive apprehension that others may be having rewarding experiences from which one is absent, and the consequence of this is the desire to stay continually connected with what others are doing (Przybylski, Murayama, DeHaan, and Gladwell, 2013; Oberst, Wegmann, Stodt, Brand, and Chamarro, 2017). This concept stimulated players' perception that playing Pokémon Go gave them a sense of connectedness to the other players who were a part of an active network of Pokémon Go. Players considered that the connectedness to others through playing the game was an extension of themselves and the way they could be portrayed (Belk, 2013). Self-extension (Belk, 2013) is an idea of oneself, a suggestive extension of one's identity through people and possessions. Through playing Pokémon Go, players felt that they were able to portray a favourable presentation of the way they would be perceived by others because they were involved in a game which had generated massive social hype at the time.

The sense of belonging codes of increased social interactions, that is, bonding with friends or family and the Pokémon Go community, narrate the same ideology behind players' sense of belonging. These codes all entail interpersonal behaviours that support the cognitive and affective traits of relatedness and the need for being valued by others. Avoidance of loneliness (Lynch, 1976) or social isolation (Cruwys, Haslam, Dingle, Jetten, Hornsey, Chong, and Oei, 2014) and integration towards social and cultural networks are all fundamental aspects of this ideology (Hagertly et al., 1996). This study showed that through the social aspect of the Pokémon Go game, players were given the tools to make new friends in the physical world, to bond over the game with friends and family, and to identify the ever growing culture of the Pokémon Go community. Players were thus motivated to play because these aspects minimized the effects of feeling lonely or socially isolated.

Perceived social isolation has been found to be a powerful longitudinal predictor of depression risk (Cruwys et al., 2014; Capcioppo, Hawkley, and Thisted, 2010). Social interactions that produce a perception of being valued have been found to effectively alleviate depression and allow individuals to feel connected again (Cruwys et al., 2014). When a person identifies with a group or internalizes their being as a contribution to said group, this provides the person with a sense of self (Cruwys et al., 2014). This idea concurs with the findings that motivation to play Pokémon Go based on a sense of belonging demonstrated players need for enjoyment and perception of a positive sense of self.

As previously noted in the literature, individuals' motivations to play online games have been linked to the constructs of enhancing self-esteem (self-worth), self-concept (perception of an individual's evaluation of self), and interpersonal relationships through game playing (Huang, Yang, and Chen, 2015). This study supports the idea that there is a relationship between these concepts and players' motivation to achieve a sense of belonging.

Social interactions in online gaming have also been found to be an important element of the enjoyment of playing (Cole and Griffiths, 2007). The enjoyment of playing acts as a predictor of engagement with an online game, which is consistent with the findings of this study that showed that players felt gratified with the social aspect of the game and this supported their participation. In terms of the Pokémon Go community itself, the nature of this constructed society meant that players who were able to identify the Pokémon Go community were more likely to sustain ongoing participation in the game because the idea of belonging to a community was fulfilling players' sense of belonging.

## **5.3** Theme 2 – Excitement

The second major theme that emerged from the thematic analysis was *Excitement*. The theme is composed of seven categorical codes: (1) *Innovative*, (2) *Adventurous*, (3) *Competitive*, (4) *Imaginary*, (5) *Challenging*, (6) *Addictive*, and (7) *Connected to the Real World*. The underlying meaning of *Excitement* and the relationship to its defining codes are interlinked concepts that help to define a player's intrinsic motivation to play Pokémon Go and also their participation with Pokémon Go. This study has identified that excitement was fundamental in both motivating people to play Pokémon Go and also as an antecedent for sustaining ongoing participation. Excitement in the context of this research is the intrinsic hedonistic and experiential novelty Pokémon Go provided its players before and during engagement with the game.

Excitement has been found to be a positive emotional state that consists of high levels of pleasure and arousal (Posner, Russell, and Peterson, 2005)/ It plays a crucial role in the perception of an object or environment and also acts as an antecedent to behavioural responses such as motivation and engagement (Wakefield and Baker, 1998). The sensations felt by Pokémon Go players can be attributed to a novelty effect, meaning that the effects of motivation to play were caused by the newness of the game and accompanying excitement this newness provided.

The fact that we live in a world that is constantly changing makes us susceptible to thoughts of doing better as change breaks the boredom of routine (Best, 2006). That idea in itself makes individuals more accepting and embracing of novel experiences that appear to be innovative and cutting edge in making life better. The motivator of excitement attributed to the initial adoption of Pokémon Go can be explained as a player's response to the changing world, in particular the change in the gaming environment itself. The Excitement codes of innovative, connected to the real world, and imaginary depict this idea as these codes present the Pokémon Go game as a development on traditional gaming. The augmented reality component of the game attests to that development as it remains a relatively new trend in gaming settings. An interpretation of the excitement generated as a motivator to play Pokémon Go towards this end suggests that players were innately activated to seek out novel information that could serve as a means of self-preservation. Self-preservation relates to an individual's desire to accumulate a "bank" of potentially useful knowledge (Hirschman, 1980). Because the future is unknowable and unexpected, consumption problems are almost inevitable; therefore, consumers seek out novel experiences that may act as useful information for the future. Pokémon Go players essentially expressed that they felt an initial pull towards the game because of its innovative nature which combined the imaginary elements of Pokémon characters in their real world. For players, keeping up with a game like Pokémon Go served the purpose of being a part of something new in the gaming world.

When individuals are aware that an innovation is spreading, they often feel excited (Best, 2006). The theme of *a sense of belonging* examined how Pokémon Go developed a social contagion which was diffused globally. The noise created from this social contagion for Pokémon Go helped to invoke excitement, as its exposure grew exponentially fast. The *Excitement* codes of *competitive, challenging, adventurous*, and *addictive* explain this idea in terms of player participation. The affective state of participating in something big, important, or new, provides individuals with sensations of thrill and joyfulness (Best, 2006). These sensations convey that there is an emotional intensity involved in the adoption and participated in elements of the game which kept that suspense alive. Competitiveness is one of the most used features of games as it stimulates an individual's struggle to be the best, if necessary even by cheating (Roy and Zaman, 2015). Pokémon Go players expressed that the challenge from the competition of the game led them on physical adventures, and

kept them engaged enough to feel a sense of addiction to the game. These elements all played their part in the affective activation of players' excitement in participating in the game.

### 5.4 Theme 3 – Nostalgia

The third major theme that emerged from the thematic analysis was *Nostalgia*. The theme is composed of two categorical codes: (1) *Prior Pokémon Fan*, and (2) *Memories of Childhood*. The underlying meaning of *Nostalgia* and the relationship to its defining codes are interrelated concepts that help to define a player's motivations and participation in Pokémon Go. Nostalgia could be interpreted as a form of passion for those players who identified as a prior fan of Pokémon. Passion has also been previously noted in the literature as an antecedent to motivation.

In the case of nostalgia, however, past definitions have referred to it as a "painful yearning of returning home" (Holak and Havlena, 1998), a longing for the past (Holbrook, 1993), or a fondness for possessions and activities associated with days of yore (Davis, 1979). This research defines nostalgia as a positive, affectively charged state whereby an individual seeks to re-experience a bitter-sweet memory from their past (Davis, 1979). The memory is bitter sweet because the past is gone, but the feelings associated with the memory are pleasant enough to want to revive it. The memory of a lived past may not even reflect the reality of that past; it may be distorted, producing a more positive picture than reality would warrant (Davis, 1979). The role of feelings plays an important part in an individual's attitudes and motivation for consumption (Holak and Havlena, 1998).

The nostalgic descriptions given by the players of Pokémon Go were related to their experiences that dealt with family, friends, and their own leisure time from childhood. The pleasant memory of the past was combined with a sense of loss associated with the realization that the past cannot be recreated.

The thematic analysis demonstrated that the motivation to play Pokémon Go was triggered by an emotional memory response of a prior affinity to Pokémon and players' memories of childhood. Players did not describe a negative effect of the nostalgia invoked by Pokémon Go such as sadness; instead, players who had a prior affinity for Pokémon from their childhood demonstrated positive associations of pleasure and arousal towards the Pokémon Go game. These positive emotional associations supported players' motivation to start playing the game and also positively influenced their ongoing participation with the game. Pokémon Go acted as a tool for the players to reflect on the positive associations of their past, as the game recaptured much of the original elements of the Pokémon storyline, thereby invoking the players' positive affective reactions to the game based on its original association with Pokémon.

Holak and Halvena (1998) described that products and messages appealing to individuals' needs involving belonging or affiliation are a strong predictor of the nostalgia component working effectively for consumption. This study found that the positive network of associations players related to Pokémon from their childhood, provided a nostalgic experience for playing Pokémon Go, which was an effective motivator for consumption of the game. Therefore, players' level of involvement or participation with the game was more dependent on a positive connection with Pokémon from their childhood.

## 5. 5 Theme 4 – Flow State

The fourth major theme that emerged from the thematic analysis was the state of *Flow*. A flow state describes the optimal experience that a person can encounter when immersed in a task, whereby their skill can balance the challenge of that task, making the task enjoyable (Csikszentmihalyi, 1990). Players who were highly engaged with playing Pokémon Go were experiencing a *Flow State*. The theme is composed of one identifiable code: *Loss of Self-Consciousness*. The loss of self-consciousness leading to a flow state supported Pokémon Go players' motivations to sustain participation with the game.

Consciousness consists of thoughts, feelings and sensations, and therefore requires an individual's input of energy that facilitates a reduced sense of awareness. When players identified a loss of self-consciousness whilst playing Pokémon Go, it indicated that their energy was transferred to the game inducing a state of flow. Flow state (Csikszentmihalyi, 1990) is operationally defined as players experiencing complete immersion in the enjoyment of a game, inducing willingness to pay a high price for the experience of optimal and heightened concentration (Liu and Shiue, 2014).

An individual's feelings are at the height of experience; therefore, an individual's evaluation of feelings is a reliable measure of their conditioning (Csikszentmihalyi, 2014). Experience is subjective; the quality of an individual's life experiences can be determined by the extent to which life is felt as worth living. The ultimate experience is the subjective reality that justifies the actions and events of those life experiences. The feelings created by those experiences therefore significantly impacts an individual's motivation towards repeating that experience. Pokémon Go players expressed positive feelings towards playing the game, before and after

the fact. Feelings of excitement, happiness, and immersion were common references amongst participants of the study when asked how playing the game made them feel.

Humankind has always been in pursuit of living a meaningful life that entails pleasure and enjoyment (Peterson, Park, and Seligman, 2005). Media such as Pokémon Go are regarded as a "cheap thrill" that provides individuals with enjoyment that is used to manage emotional states of under-stimulation or over-stimulation (Sherry, 2004). Flow offers a theoretical explanation for enjoyment, which supports human orientations towards happiness and life satisfaction (Peterson et al., 2005).

When experiencing a flow state, the height of enjoyment is when there is a merging of action and awareness; a concentration that temporarily excludes irrelevant thoughts and feelings from consciousness. A flow state existed for Pokémon Go players, as expressed by a 'disengagement' from the world and becoming immersed with the game play. This meant that stimuli outside the activity of playing the game had no access to consciousness; past and future ceased to exist subjectively (Csikszentmihalyi, 2014). The optimal experience of flow is self-rewarding; therefore, an activity that produces an optimal experience may become addictive as people choose to involve themselves in activities that are intrinsically rewarding. Pokémon Go was regarded as an intrinsically rewarding experience for those players who participated with the game, therefore influencing player's intentions of ongoing participation with the game.

## 5.6 Theme 5 – Killing Time

The fifth major theme that emerged from the thematic analysis was *Killing Time*. The theme is composed of one identifiable code, *Getting Rid of Boredom*. The relationship between these two concepts helps to describe a player's motivation and participation in Pokémon Go. The purpose of killing time can also be interpreted as a pursuit of entertainment. Entertainment helps media users cope with everyday life. For some, it is a way to compensate during unpleasant times, and for others it is a means of fulfilling one's own potential (Vorderer, 2001). In the case of this research, Pokémon Go was sought as a means for killing time.

Killing time is an intrinsically driven construct explained by this study as the motivational result of getting rid of boredom. The relative freedom from necessity, the growing reliance on "cheap thrills" as a way of energizing oneself, and the sense of liberation and emancipation felt by many provide the conditions in which boredom can so easily and effortlessly be

experienced (Brissett and Snow, 1993). Boredom can be defined as an unpleasant, transient affective state in which an individual feels a pervasive lack of interest in and difficulty concentrating on what is currently happening (Fisherl, 1993; Conrad, 1997). Boredom is deemed a fundamentally negative, subjective state that is an interactional phenomenon directly connected to social rhythm. It is an experience of the absence of momentum or flow in a person's life (Brissett and Snow, 1993). Boredom thus occurs when there is less or more to do than one is capable of (Csikszentmihalyi, 2014).

It would be difficult to experience boredom unless there was anticipation towards the possibility of something else. Therefore, the felt effect of boredom implies a sensation of set expectations (Conrad, 1997), the negative experience of wanting, but unable to engage in satisfying activity (Eastwood, Frischen, Fenske, and Smilek, 2012). Because boredom is related to a sense of purpose in life (Melton and Schulenberg, 2007), boredom can also be invoked as a label for motivation (Brissett and Snow, 1993). In terms of this study, the motivation behind killing time and getting rid of boredom refers to players seeking higher level arousal, for example killing time by playing Pokémon Go for excitement.

Regardless of boredom intensity, people often strive to achieve an optimal level of arousal that is relative to the demands of their current situation (Eastwood et al., 2012). The motivation of Pokémon Go players killing time by playing the game describes 'time' in the sense that when their affective state was within the realms of boredom, playing the game dissociated that "time" of boredom with something more enjoyable. Media users expect a guaranteed return on investment of the time they spend on media consumption in the form of enjoyment (Raney, 2004). Therefore, consumers seek out media they think will help them reach this end goal of enjoyment. Playing Pokémon Go facilitated an alternative experience for players that had an expectation of enjoyment from the game, thus counteracting the times they felt bored with the excitement related to the game.

## 5.7 Theme 6 – Accomplishment

The sixth major theme that emerged from the thematic analysis was *Accomplishment*. The theme is composed of two categorical codes: (1) *Reward by Reaching Higher Levels*, and (2) *Reward by Collecting Pokémon*. Accomplishment, an intrinsic affective motivation to play Pokémon Go, was instrumented by the two in-game mechanics of reward. Players felt rewarded when they progressed to higher levels within the game, which also rewarded them with Pokémon for collection. Accomplishment or achievement has also long been noted in

the literature as a motivation to engage in video games (Billieux, et al., 2013; Hussain and Griffiths, 2014; Yee, 2006).

An individual is intrinsically motivated to perform an activity when the reward is associated with the activity itself (Deci, 1971). The intrinsic reward of accomplishment through the collection of Pokémon and progression within the game formed a supplementary element of competition amongst players outside of the game. The competitive behaviour outside the game acted as a spill-over effect arguably providing players with additional extrinsic motivation to participate in the game further.

Competitiveness is one of the most used features of games and it stimulates an individual's struggle to be the best, if necessary even by cheating (Roy and Zaman, 2015). Competition is a special type of extrinsic activity as it often necessitates being competent and effective, thus enabling a person to measure their competence by competing with another. When a person is focused on the goal of "winning" as a separable outcome of the activity, rather than the process of doing the activity well, the behaviour is extrinsically motivated (Deci, Betley, Kahle, Abrams and Porac, 1981).

However, from the two examples of motivation illustrated, accomplishment as an intrinsic gratification was players' core motivation to play Pokémon Go. The findings showed that although competitive behaviour was present in the theme of accomplishment, the enjoyment of the experience of collection and progression satisfied players more than any separable outcome related to the felt competition. As competitive behaviour is not a tangible reward in itself alone, the separable outcome of competition and "catching them all" reinforced that the motivation to play Pokémon Go for reward was an intrinsic gratification. Players felt a sense of accomplishment through the game's reward system, which in turn gave them all the more reason to continue participating in the game for that purpose.

## 5.8 Theme 7 – Stopped Playing

The last major theme that emerged from the thematic analysis was that people *Stopped Playing* Pokémon Go. The theme is composed of five sub-themes and one compilation of miscellaneous codes (see sub-theme 6). The sub-themes belonging to the reason people stopped playing Pokémon Go are, (1) *Social Influence,* (2) *Game Features,* (3) *Technical Issues,* (4) *Not Worth the Effort,* (5) *No More Novelty,* and (6) *Other Factors.* Although the compilation of codes labelled as *Other Factors* do not belong to a particular sub-theme per se, the findings are still relevant to understanding the theme overall. The finding that people stopped playing Pokémon Go provides significant insight into what went wrong for Pokémon Go, as well as practical implications for future-proofing potential fads like Pokémon Go.

In hindsight, the most interesting aspect of the finding that people stopped playing Pokémon Go is that the sub-themes belonging to this theme somewhat mirror the findings from the first six themes that explain player motivations to play Pokémon Go (see Table 8). For example, social influence was both a motivator to play Pokémon Go and a motivator to stop playing. The identification of other people no longer playing Pokémon Go had a direct effect on players' motivations to further participate with the game relative to players' perception of becoming susceptible to social isolation or loneliness. For instance, when players jumped aboard the Pokémon Go bandwagon, they reaffirmed the choices of those trendsetters who preceded them in the adoption of the game. In turn, players reassured themselves that they made the right decision by following the trend (Best, 2006). When players identified that the Pokémon Go trend was declining, they became prevention focused (e.g., prevention of social isolation). When prevention focused, individuals are primarily concerned with achieving security while attempting to avoid negative outcomes. Meeting these concerns brings feelings of calm, whereas anticipating or experiencing a failure to meet these concerns arouses anxiety (Higgins, 1997). Consequently, prevention focused individuals adopt attentive strategies that involve protecting themselves against loss, even at the risk of missing opportunities (Lucas, Knowles, Gardner, Molden, and Jefferis, 2010). For example, when evaluating their motivation to play, Pokémon Go players too precautions by avoiding the game altogether to avoid potential isolation.

The effect of the game's features on the motivation to stop playing Pokémon Go also had a correlation with the excitement that motivated people to originally play Pokémon Go. For example, the result of restricted Pokémon sightings was that players were unable to perpetuate the competitive element of the game. The excitement incurred from the competitive element of the game is what sustained players' ongoing participation with the game; however, when the competitiveness declined, so too did their participation. Similarly, the motivation evoked by the challenge of Pokémon Go was both a motivator to play and a motivator to stop playing. The challenge within the game was inconsistent for players, which affected players' interest in pursuing the game further. The amount of interaction players had with the Pokémon characters also affected the excitement evoked by the imaginary element of the game. Players expected the technology of the game to allow them to interact more with the characters. The expectation of interaction was derived from players' exposure to previous

92

Pokémon narratives, where interaction between 'Pokémon Master' and 'Pokémon Characters' was evident.

The technical issues with the game affected player motivations to play by reducing the amount of excitement stimulated by the game as well as reducing players' ability to kill time by playing the game. The glitching server affected the perception of the games' innovativeness, which ultimately affected player motivation to continue playing. The fact that the game drained players' mobile device batteries and data rapidly meant that engaging with the game during times of boredom could also be affected negatively by players who were conscious of their mobile device batteries and data usage.

In terms of the motivation to stop playing because players felt the game was not worth their effort, players insinuated a dissatisfaction towards the level of reward they received based on the work they exerted to continue playing the game. This dissatisfaction relates back to the original motivation to play Pokémon Go by affecting the felt accomplishment of players. Similarly, the motivation to stop playing because players felt that the novelty of playing the game had worn off explains players' felt dissatisfaction towards the game's development. The view that the game was repetitive decreased the felt challenge towards playing the game and therefore the players' intrinsic excitement. The slow introduction of new game features and development towards keeping up the excitement of players appears to have affected the initial perception that the game was innovative. Together, after playing Pokémon Go, these concepts constructed the belief that the game was boring, therefore directly interrupting the chance to reach flow state.

The final factors that caused players to stop playing Pokémon Go relate to the loss of excitement invoked by the game as well as the lack of nostalgia. Players who had been exposed to the Pokémon Go trailer before the game's release had high expectations for the game based on this. Players' view that this expectation was not met after playing the game decreased excitement based on the innovativeness the game possessed. Lastly, based on the findings of this study, it can be concluded that those players who did not possess a prior affinity for Pokémon were more likely to stop playing as nostalgia was not present. This assumption comes into play in conjunction with the other motivators to stop playing, reaffirming the importance of the nostalgia component in the motivation to play Pokémon Go.

Motivations to Stop Playing	Motivations to Play
Social influence:	Sense of Belonging:
- Other people stopped playing	- Social influence
Game features:	Excitement:
<ul> <li>Restricted Pokémon sightings</li> <li>Not challenging enough</li> <li>No interaction with Pokémon</li> </ul>	<ul><li>Competitive</li><li>Challenging</li><li>Imaginary</li></ul>
Technical issues:	Excitement:
<ul><li>Server was glitching</li><li>Drained battery and data</li></ul>	<ul> <li>Innovative</li> <li><i>Killing time:</i></li> <li>Getting rid of boredom</li> </ul>
Not worth the effort:	Accomplishment:
- Work exceeded reward	<ul><li>Reward by reaching higher levels</li><li>Reward by collecting Pokémon</li></ul>
No more novelty:	Excitement:
<ul><li>Repetitive</li><li>Nothing new</li><li>Game was boring</li></ul>	<ul> <li>Challenging</li> <li>Innovative</li> <li><i>Flow State:</i></li> <li>Loss of self-consciousness</li> </ul>
Other factors:	Excitement:
<ul><li>Overpromised in trailer</li><li>No prior affinity</li></ul>	<ul> <li>Innovative</li> <li><i>Nostalgia:</i></li> <li>Prior fan of Pokémon</li> </ul>

Table 8: Comparison of Motivations to Stop Playing Pokémon Go vs. Motivations to Play

Uses and gratifications theory posits that media users seek gratifications from media and technology use based on their individual needs or motivations. If those needs are gratified, then individuals are likely to repeat such experiences (Huang, Hsieh, and Wu, 2014). Pokémon Go's popularity finally came to an end. Adoption of the game played an intrinsic, emotionally stimulating role for those who played it. The impulsive adoption of the game by

players did not include any rational decision making. The game diffused rapidly, gained quick acceptance amongst its players, and then died off when it stopped providing its players intrinsic fulfilment, much like other generational fads (Solomon, 1994). Pokémon Go therefore no longer met the purpose of players' needs for adoption (Shade, Kornfield and Oliver, 2015), as seen in Table 8, thus ultimately leading to its demise.

## 5.9 Conclusion

The purpose of this research was to identify what motives drove Pokémon Go players to play the augmented reality mobile game. It investigated what sustained players' ongoing participation with the game and explored the reasons/motives that caused players to stop playing the game. The findings highlighted seven important themes that explained the complex mix of desires and motivations that led individuals to play Pokémon Go. In addition, the findings showed that when the motivating factors to play Pokémon Go decreased, involvement with the game also decreased. The significance of this research is in its description of the different motivations to play Pokémon Go, which provides relevant implications for future phenomenon/s similar to Pokémon Go. Fundamentally, this study showed that the motivation to play Pokémon Go was emotional stimulation, which had a direct impact on whether ongoing participation with the game would be sustained.

### 5.10 Implications

This research showed that various motivators contributed to the overall hype of Pokemon Go. The use of the term 'hype' in this study was based on the massive global adoption of the game, with a specific focus on player motivations to play and the noise that occurred both online and offline surrounding the game. The results of the study based on a sample of 10 Auckland players seven months after the game was released, showed that a range of feelings motivated consumers to download and play the game. These feelings were a sense of belonging, excitement, nostalgia, flow, killing time, and accomplishment. Once some of these feelings were no longer being satisfied through playing the game and other contributing factors related to the game arose, players stopped playing the game. This finding has managerial implications for both marketing practitioners and gaming developers.

The managerial implications include conclusions relating to both Pokemon Go's success and its failure. Implications for its success relate to the power of something going viral through social media, and it's proceeding influence on consumer decision making. The popularity of the game both online and offline clearly activated inherent motivations in consumers to not only download the game but to continue playing it until those motivations to play reached a peak of satisfaction, before other factors hindered that satisfaction being met. As well as the game's successful social media strategy, the intention of the game and its fit with the original Pokemon brand was seemingly congruent with the storyline of the brand. The purpose of the game was not only to create its own empire, but also to give value back to the Pokemon brand in an innovative real-life gaming context. The co-creation of value between the companies gave new life to the gaming industry in the direction of augmented reality technology and how successful it can be.

The managerial implications regarding failure therefore lie with the game developer's control of the additional factors that contributed to the games short life-cycle fate and why it succumbed to a fad. The study found that players stopped playing the game when their social needs were not being met, there were issues with the features of the game as well as technical difficulties, a loss of novelty with the game, the effort to play the game exceeding the reward, and some disinterested players were unable to find the traction to continue playing. These findings apply to future gaming development and marketing endeavours wishing to achieve the same success Pokemon Go initially accomplished. The uniqueness of this finding suggests that practitioners should try to control such factors in the future from the get go of a game's release into the market, to avoid the shortcomings of fad life-cycles.

In terms of the implications for the technology of augmented reality, marketers wanting to prepare for longer-term sustainability should consider the precise role their brands can play in an ecosystem where augmented reality is backed in to everyday tools, gadgets, and platforms. The emergence of Pokemon Go suggests that when the variables of motivation are lined up correctly, augmented reality works in supporting consumer decision making. However, this study also showed that adding value to consumers' lives is more important than novelty alone. Once the novelty of Pokemon Go wore off, so too did its consumers.

The theoretical implications of this study support the findings of previous studies that have shown that video game immediacy, consistency, and density of need satisfactions contribute to game play enjoyment and immersion and are associated in variations in players' short-term wellbeing and future desire to play (Ryan and Deci, 2017). In order to keep players motivated to play, their need satisfactions must be met. As the findings of this study have shown, player motivations to sustain participation with the game declined once their needs were no longer being met. Pokemon Go technical issues affected the immediacy of the video game, while players' issues with the game features affected the video game's consistency. The consequences of a loss of novelty and social influence affected the density of player need satisfaction and therefore the totality of these effects caused players to stop playing Pokemon Go.

The motivational findings of a sense of belonging, flow state, killing time, and accomplishment have also been conveyed in previous studies on gaming motivations (Yee et al., 2011; Graham et al., 2013; Ryan et al., 2000; Huang et al., 2015; Banyte et al., 2015; Billieux et al., 2013; Hussain et al., 2014; Sherry, 2004; Vorderer, 2001; Mahlangu, 2015; Rossi, 2009; Csikzentmihalyi, 1990; Faiola et al., 2013). This study reinforces those findings with the addition of the new-found gaming motivators of excitement and nostalgia also playing their part in motivating consumers to play Pokemon Go.

The findings concerning the reasons/motives that caused players to stop playing Pokemon Go also support Shade and colleagues' 2015 study on the predictors of media migration which found media preferences and cognitive and affective aspects to be indicators of media enjoyment and continued use (Shade, et al., 2015). Media preferences as an indicator of continued use relates to this study's finding regarding players' issue with the game features being unsatisfactory. The cognitive and affective aspects relate to players' social needs no longer being met, the technical issues, playing the game no longer being worth the effort, and a loss of novelty. The other factors identified as reasons for why players stopped playing the game also offer some insight into the consequences of over-promising ideas in advertising and the fate of players who possessed no prior affinity to the Pokemon brand.

The methodological contribution of this study is recognized in the way the research was conducted. As in-depth interviews took place with Pokemon Go players who identified as highly engaged with the game upon recruitment, it meant that the data sought could be directly drawn from the players themselves. The face-to-face encounter between the researcher and the research participants enabled rapport to be made, which put the respondents at ease when being questioned on their personal experiences with the game. This technique assisted in the development of the questioning process after each question was answered and in obtaining rich first-hand accounts of data that supplied their motives to play and stop playing Pokemon Go.

97

### 5.11 Limitations of the Study

The findings of this study are limited relevant to the sample size and scope of the research participants. In total, 10 Pokemon Go players located in Auckland, with the majority of participants being female, were recruited as research participants. A more demographically diverse sample could have enriched the findings of this study by allowing for comparisons of motivations between the different demographics. For example, a sample that included more male players, various age groups, participants of different cultures and from other towns and cities, would have made generalizability of the findings much more feasible.

There was only one pre-condition regarding participant selection, which was that each respondent must have reached a level beyond level 10 in the game. This pre-condition, although making the job of recruitment simpler, limited the selection opportunity. For example, had there been stricter pre-conditions regarding specific player types (Bartle, 2005) and recruitment of players with defined personality traits (Yee et al., 2011) and lifestyle characteristics, the validity of the findings would have been strengthened.

Another limitation of this study is the timeframe in which the data was collected. Pokemon Go was released for the very first time on the 6<sup>th</sup> July 2016 in New Zealand, research participants were then sought and recruited in August 2016. The interviewing stage did not commence until March 2017, seven months after the game was released. This delay in the data collection meant that the recall of participants was affected. If the data collection was conducted at an earlier stage (i.e., August 2016), participants' initial recollection of feelings and motives for playing would have still been fresh, thus providing richer data for the research.

Additionally, the aim of this research focused solely on the player motivations for playing Pokémon Go, with the goal of producing practical implications for the sustainability of future commercial games similar to Pokémon Go. This may give a one-sided perspective to the research issue; for example, the notion of gaming addiction and the negative effects it may provide players thereafter are not explored in this research. Therefore, the utility of the implications drawn from this research are not holistic in nature and cannot be relied upon independently.

## 5.12 Directions for Future Research

Based on the flaws of this particular research regarding the sample frame, future research that seeks to pursue the same avenue of understanding what motivated players to start and stop

playing Pokemon Go could recruit a more diverse sample of research participants. A large sample that includes an even distribution of male to female participants of all ages and cultures would provide concentrated data. Conducting the study in multiple towns and cities around the world where Pokemon Go was predominately played would also prove fruitful as the demographic data across the board could be compared supporting rigour.

Likewise, future research in the form of a longitudinal study that investigates player motivations to play a game on its release, during consumption, and after consumption over a one year period would gain greater insight than the findings of this study, as research participant recall would be less affected.

Moreover, in terms of expanding this particular research, future research could apply Bartle's (2005) specific player types model and Yee and colleagues' (2011) personality traits model to the data collection process. The exploration of the effect of player characteristics on motivation would help to identify the antecedents that take place before a player feels motivated to play Pokemon Go and build on previous assumptions that were not investigated in this study. The motivational variables of nostalgia and excitement are of particular interest in this sense.

Additionally, future research could investigate how Pokemon Go functioned as a social world for its players, similar to the previous research of Ducheneaut and colleagues (2006). As the findings of this research identified social belonging as a strong motivator to play the game, examining both the positive and negative effects of Pokemon Go as a social world would provide useful theoretical and managerial implications.

Furthermore, to build on the finding of this research concerning why players stopped playing Pokemon Go, future research that focused on what could make Pokemon Go players reengage with the game would have both managerial and theoretical implications that provided insight into whether there is life after death for fads, and how an afterlife could be made possible for Pokemon Go.

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# **Appendices**

### **Appendix 1: Ethics Approval**

22 February 2017

Ken Hyde Faculty of Business Economics and Law

Dear Ken

Re Ethics Application: 17/7 Pokemon Go - What's behind the hype?

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Sub -Committee (AUTEC).

Your ethics application has been approved for three years until 22 February 2020.

As part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through <u>http://www.aut.ac.nz/researchethics</u>. When necessary, this form may also be used to request an extension of the approval at least one month prior to its expiry on 22 February 2020;
- A brief report on the status of the project using form EA3, which is available online through <u>http://www.aut.ac.nz/researchethics</u>. This report is to be submitted either when the approval expires on 22 February 2020 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organization for your research, then you will need to obtain this.

To enable us to provide you with efficient service, please use the application number and study title in all correspondence with us. If you have any enquiries about this application, or anything else, please do contact us at <u>ethics@aut.ac.nz</u>.

All the very best with your research,

Malounar

Kate O'Connor Executive Secretary

# Auckland University of Technology Ethics Committee

Cc: annaahmad91@gmial.com; Yingzi Xu

# **Appendix 2: Participant Information Sheet**

### **Participant Information Sheet**

### **Date Information Sheet Produced:**

18/01/2017

## **Project Title**

Pokémon Go - what's behind the hype?

### An Invitation

You have been selected to participate in this research because you have been identified as an advanced player of Pokémon Go. This research is being conducted as part of my Master of Business degree with Auckland University of Technology.

## What is the purpose of this research?

The aim of the research is to identify what motivates people to play Pokémon Go and

sustains their continued participation in the game.

### How was I identified and why am I being invited to participate in this research?

You have been selected on the basis that you have played the game at a level beyond a beginner.

### How do I agree to participate in this research?

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You will be invited to sign a consent form for participation in the interview.

You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

### What will happen in this research?

You will be asked simple questions in the context of your experiences with the Pokémon Go

App. The interview will take between 15 – 30 minutes and the interview will be voice

recorded for the purpose of transcribing the data. In no way will the questions or answers

you give be linked back to you. You will be offered the opportunity to review the transcript

of the interview, after the transcript is prepared, and prior to the commencements of data analysis.

### Where will the interview take place?

The interview will take place at either **AUT South Campus** (in the MA1 library study rooms), or **AUT City Campus** (AUT Law Building level 4). Location, time and date are dependent on your convenience and will be discussed and arranged with you. Please refer to maps below for locations.

#### What are the discomforts and risks?

There are no potential discomforts with completing the interview.

#### How will these discomforts and risks be alleviated?

There are minimal discomforts or risks involved in this research.

#### What are the benefits?

You will receive a \$25 gift voucher as a token of appreciation for your participation.

#### How will my privacy be protected?

The interview is confidential and you will not be asked for any information that will identify you.

#### What are the costs of participating in this research?

There is no cost in participating in the research. The interview may require up to 30 minutes of your time.

#### What opportunity do I have to consider this invitation?

Please take up to one week to decide if you want to respond.

#### Will I receive feedback on the results of this research?

If you would like to request an Executive Summary of the research findings when they are complete, please email *anahmad@aut.ac.nz* 

#### What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Assoc. Prof. Ken Hyde, ken.hyde@aut.ac.nz, (09) 921 9999 ext 5605.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, ethics@aut.ac.nz, (09) 921 9999 ext 6038.

#### Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

#### **Researcher Contact Details:**

Anna Ahmad

anahmad@aut.ac.nz

021599811

#### **Project Supervisor Contact Details:**

Assoc. Prof. Ken Hyde

ken.hyde@aut.ac.nz

(09) 921 9999 ext 5605

## **AUT SOUTH CAMPUS MAP**

Library Building (MA Level 1), 6040 Great South Road, Manukau 2025.



#### SERVICES AND FACILITIES

Library – Ground floor, MA building Learning Lab – Level 1, MA building Café – Level 2, MD building Fitness Centre – Level 1, MD building Boardrooms – Level 3, MB building Estates Service Centre, Security – MF building Health, Counselling & Wellbeing – Level 1, MB building AuSM (Auckland Student Movement @ AUT) – ME building

#### STUDENT HUB & RECEPTION

Level 1, MB building Phone: 0800 AUT SOUTH (0800 288 768) Web: www.auLac.nz

#### JOIN A CAMPUS TOUR

Tuesdays at 2pm Student Hub

- Cafés
  Conference facility
  Intercampus shuttle bus stop
- Public transport

Student Hub

- A Pedestrian access
- A Mobility parks

#### AUT CITY CAMPUS MAP

AUT Law Building (Level 4), Corner of Wakefield Street and Mayoral Drive, Auckland CBD.



Approved by the Auckland University of Technology Ethics Committee on type the date final ethics approval was granted, AUTEC Reference number type the reference number.

### Appendix 3: Participant Consent Form

Project title:Pokemon Go – what's behind the hype?Project Supervisor:Associate Professor Ken HydeResearcher:Anna Ahmad

O I have read and understood the information provided about this research project in the Information Sheet dated 18/01/2017

O I have had an opportunity to ask questions and to have them answered.

O I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.

O I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.

O I understand that if I withdraw from the study, then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.

- O I agree to take part in this research.
- I wish to receive a summary of the research findings (please tick one): YesO
  NoO

Participant's signature:

.....

Participant's name: .....

Participant's Contact Details (if appropriate):

.....

.....

Date:

## Approved by the Auckland University of Technology Ethics Committee on 22/02/2017.

Note: The Participant should retain a copy of this form.

# Appendix 4: Sample Interview Transcript INTERVIEW 1

Female, 18 years, Sandringham, Student.

Anna: Can you please tell me about your usage of Pokémon Go, for example, how long have you been playing?

Respondent 1: Oh, I played for like about a month or two like when it came out, and then I don't play it at all anymore.

Anna: So you have stopped?

R1: Yeah.

A: When you were playing, how often did you play?

R1: I would check my phone a lot, like, I wouldn't stay on it heaps, but I would check it all the time, I would say like maybe three times an hour or something, I would just always check it and then I would just hop off.

A: Everyday?

R1: Yeah.

A: How long did you usually spend playing Pokémon go in one sitting?

R1: Maybe like five minutes max. I didn't play if for that long at all, sometimes I would just open it and then if there's nothing there I would just close it again.

A: What were you looking for in the game?

R1: Like because in the game, Pokémon are meant to pop up, so I would just open it to see if there's anything around. If there's nothing there, I wouldn't go out of my way and like walk around and look for it like if it's in the area then, yeah.

A: That's cool; did you watch Pokémon, like the series? On TV, at all ever in your life?

R1: Yeah when I was a kid.

A: How old do you think you were at the time?

R1: I think like maybe five or six.

A: How did you feel about Pokémon then?

R1: It was like my favourite, it was like, I also had the games and stuff when I was a kid and like cards and, so I was a huge fan but um, yeah.

A: That's cool, so would you say you were a fan of Pokémon in general or ...?

R1: Yeah, just a fan of Pokémon in general, mostly like the games on consoles like Nintendo, that stuff.

A: So with the Pokémon go app, what team did you belong to in the game?

R1: It was the red one, I don't remember what it was called.

A: So do you think that that team affected the way you played at all?

R1: No, I think Pokémon Go was just, for me, I didn't really care about versing other people, I just liked to collect the Pokémon's. I don't know, just something to kill time really, it wasn't that great.

A: So, what level did you get up to in the game?

R1: Not far, I think level 12.

A: So, can you explain to me, why did you start playing Pokémon Go?

R1: I was a fan to start with, and I thought the concept was cool, but it turned out to be a disappointment um, and it was just the hype, it was all about the hype at the time.

A: What triggered that hype do you think, or your perspective on it, and what triggered you to play?

R1: Um, I was just a huge fan really and I think the whole idea was something new, and it looked a lot better when they were advertising and stuff yeah, like it felt, it was a real kind of thing, it's like your actually catching Pokémon.

A: So, like the augmented reality.

R1: Yeah, it was exciting.

A: You mentioned earlier that you were disappointed with the game; can you elaborate a little bit about the disappointment?

R1: Really the advertising just made it look really cool, like it was pretty boring, there wasn't much to it, it was just you like catch Pokémon and then you don't really do much, there isn't much do the game, it's kind of boring.

A: And when you say advertising, what in particular, what advertisements are you talking about?

R1: They had a video, just the graphics and stuff, it looked really cool, like it looked like real life. I don't remember specifically what the video looked like in my head, but I just remember it being like really capturing, like so cool.

A: Where were you exposed to that advertisement? Was it like an online pop up or did you see it on social media or...?

R1: My brother actually told me about it, so I don't know how he saw it but he showed me the video on YouTube.

A: So, where do you usually go to play the game?

R1: I didn't move, I just kind of stayed home. So if I was in town for like uni, there's a lot around so I'll kind of play a bit there, I don't really leave the house to go purposely play or something.

A: So, you just played to your convenience?

R1: Yeah.

A: How do you see yourself with the game?

R1: Sorry, what do you mean?

A: So like, would you consider you were a fan of the game or like did that perspective change?

R1: I thought I just wanted to try it out um, I didn't turn out to be a big fan of it and I just kind of kept playing because everyone else was. I don't know, it was kind of something to just kill time and eventually it just didn't have any interest anymore.

A: While you were playing, were you aware of the time or the amount of time you spent playing the game?

R1: Not really, I would kind of just open it up, sorry what do you mean?

A: Did you ever get lost in the game and realize later, "Oh would you look at the time, I didn't realize I just spent..."?

R1: Nah, I wouldn't go that far.

A: So, was it kind of just a short burst of time?

R1: Yeah, kill time.

A: What words would you use to best describe how playing Pokémon Go makes you feel or made you feel while you were playing it?

R1: It's a little addictive because I wanted to catch them all but um, yeah, it was just kind of addictive, I don't know what else to say.

A: Feelings, did you feel happy or disappointed or...?

R1: It's a little bit exciting like something cool, but that's about it, it's not like, yeah.

A: Did you play alone or did you play with other people?

R1: Alone.

A: What did you enjoy most about playing the game?

R1: Just when new stuff comes up, otherwise, it's a bit boring. It's frustrating when you get like 10 million zoobats but um, yeah, that's kind of it, when there's something new it's the only exciting part about it to me.

A: Did you make any new friends from playing the game?

R1: No.

A: How difficult do you find the game to play?

R1: Not too difficult, there's not much to it really. You're swiping on a screen, it's not much, there's no strategy.

A: Learning to play it, was that difficult?

R1: At the start it was confusing because they don't really tell you how to play, there's no tutorial, you're kind of just stuck on a screen you don't know, and then you start realizing, "Oh I have to walk around in real life".

A: What got you playing or understanding how to play the game when it was difficult at the start, like why did you persist if it was difficult?

R1: I think we just googled it, because we thought it was a glitch and we thought what's wrong with it, so we just googled it and saw, "Oh we have to walk around".

A: Would you consider yourself up to speed with how the game works?

R1: Now?

A: Yeah.

R1: I haven't touched it.

A: Now if you were to go back and play it, do you think you'll kind of know?

R1: Yeah, there's, I don't think they introduced anything new and it's like really not much to it, so I guess it's pretty simple once you know how it works and you understand, "Oh its ok".

A: Are you satisfied with the level of control in the game?

R1: I wish there was more like hints rather than just walking around like a zombie like trying to look for stuff. I think they should just introduce more stuff.

A: You feel like something's missing?

R1: Yeah.

A: Do you often play games on your phone?

R1: No, but I would have like a few and play for a while then get bored of it, not usually, just stuff to kill time really.

A: So, how many are you currently playing at the moment?

R1: Just one.

A: Which game is that?

R1: Gordon Ramsey dash. I love it, I love hearing him scream at you.

A: Did you play any other games more than Pokémon Go?

R1: I had the actual Pokémon on Nintendo DS but I mean I was kind of into that but I don't really get into games. I don't go insane on it, I just kind of play every once in a while, I think that I just played that a little bit more.

A: At this point in time, do you think you'll continue to play Pokémon Go?

R1: Definitely not.

A: Why is that?

R1: It's just boring to be honest. There's nothing fun about it.

A: Do you want a change?

R1: Yeah.