Gotta Catch 'Em All!

A case study on Pokemon Go players and their experiences with online and offline social relations

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ABSTRACT

Within the research field of game studies, an ongoing discussion is held between different scholars and their opposing opinions and statements concerning the impact of online gaming on gamer's sociability. This back and forth discussion on whether or not online gaming is perceived negatively or positively concerning one's social relations is hard to determine, due to the variety of contradictory opinions and research results. Moreover, with the launch of Pokemon Go in 2016, possible new perspectives to the discussion of gamer's sociability have been introduced. Due to the pervasive game structure of Pokemon Go and the incorporated use of augmented reality, online players are encouraged to enjoy the game in a new gaming environment. Due to pervasive gaming, online games are no longer bounded to an online gaming environment but can be practiced in the offline 'real' world. Due to this innovative change, the player's considered sociability has been questioned once more. Hence, the new setting in which pervasive games are enjoyed, and the encouragement of players to go outside, new social interactions amongst gamers has occurred in the outside offline sphere. Therefore, this case study research on Pokemon Go focuses on how Pokemon Go players in the Netherlands experience social relationships, both online and offline, through gameplay. Since Pokemon Go is a pervasive game, gamers can foster both online and offline relationships with other players. This form of online game is rather new and, therefore, underrepresented in academic research. According to a qualitative research design, twelve in-depth interviews were held to gain more understanding and insights into this new online gaming player sociability. Study shows that a more in-depth variation within the concept of gamer needs to be provided to answer the research question. Not every gamer has the same motivation, intention, and experiences. Therefore, a broader spectrum of the concept of gamer is given. Moreover, in Pokemon Go, online gaming has no negative impacts on player's offline sociability. Nevertheless, it can be seen as an improvement of gamer's offline social relationships. However, this is only applicable to players who have intrinsic motivations and interest in enlarging their social circles.

KEYWORDS: *Pokemon Go, Social relationships, Player experiences, Qualitative study, In-depth interviews.*

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Preface

Foremost, I would like to express my sincere gratitude and my honest appreciation of my master's thesis supervisor, Dr. Teresa de la Hera Conde-Pumpido. Thank you for your insightful remarks, constructive feedback, encouragement, empowering words, and patience. With the help of her guidance and support, I had managed to finish this research paper in the best way possible. Even though we are in troubled times due to Covid-19, her supervision was as complete and helpful as always.

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1. Introduction

The world first got to know of *Pokemon Go* (Niantic, 2016) when the game got released to celebrate the 20th anniversary of the original Pokemon games for the Nintendo Game Boy. In the name of the first-ever Pokemon Super Bowl, the game app got introduced and directly left its marks globally (Weinberger, 2016). Within the first month, the game generated record revenue of $207 million and counted 45 million global players within the same month (Iqbal, 2020). In 2016, people massively gathered together to go outside to play the newest online mobile game app *Pokemon Go* (Ninantic, 2016; Pokemon GO, 2020). The newly released pervasive augmented reality game changed the gameplay nature of online games. In order to play the game, it requires physical effort in the outdoors. Therefore, the nature of gaming, which commonly portrays a slightly relaxed and lazy leisure activity changed. This new environment of gameplay comes with social consequences. Even though *Pokemon Go* (Niantic, 2016) is a single-player game, a lot of interaction and involvement with other players is occurring. Therefore, the social aspect of playing *Pokemon Go* (Niantic, 2016) is an exciting field for research. The social aspect of *Pokemon Go* (Niantic, 2016) is essential to this study since this study focuses explicitly on *Pokemon Go* players' experiences with the sociability brought by the game. In other words, according to in-depth interviews, this study is researching how *Pokemon Go* players experience social relations with other players through gameplay.

1.1. Pokemon Go

Pokemon Go (Niantic, 2016) is a mobile game for both iPhone as Android smartphones presented by Niantic and the Pokemon Company. The pervasive and augmented reality game enables players to catch, train, collect, and distribute Pokemon. In order to successfully play the game, gamers need to go on treasure hunts in their environments to encounter Pokemon according to their GPS systems. Through GPS and the smartphone camera function, the game design implemented real-life elements, which creates an augmented reality. Therefore, *Pokemon Go* (Niantic, 2016) could be considered a pervasive game. Pervasive games include experimental game designs that engage with both technological development and everyday space. These games stimulate players to move through the physical world; in return, the game delivers gaming experiences adaptable to where they are, and what they do (Kasapakis & Gavalas, 2017).

The game is inspired by the worldwide popular Pokemon franchise that aired two decades ago on national television. Studies found that nostalgia is one of the reasons *Pokemon Go* (Ninantic, 2016) is so popular (Zsila, Orosz, Bőthe, Tóth-Királyab, Király, Griffiths, & Demetrovics, 2018; Rasche, Schlomann, & Mertens, 2017; Cheung, Wildschut, Sedikides, Hepper, Arndt, & Vingerhoets, 2013). Ever since the appearance and adventures of no one less than Ash Ketchum from Pallet Town, many youngsters but moreover people from every age were attracted to the series.

The game's top peak was one week after its release, with 28.5 million players a day in the United States of America (Huynh & Ghimire, 2017). Players reportedly played it for 26 minutes on an average day (Smith, 2016). On top of that, the game established to monitor 750 million downloads worldwide within the first year of its existence. It raised 1.8 billion dollars in revenue in two years (Nelson, 2018). It is safe to say that after the launch of *Pokemon Go* (Niantic, 2016), location-based augmented reality games have entered the consumer markets. Social statistics show that in 2019, 57% of currently active users play *Pokemon Go* (Niantic, 2016) for 1 to 3 hours a day. Moreover, 68% of its users admit playing the game either while hanging out with friends or while doing errands, and 46% claims to prefer the game in the company of others (Iqbal, 2020).

In addition to its worldwide commercial success, it is essential to note the sociability aspects that *Pokemon Go* (Niantic, 2016) brings to its players. First off, *Pokemon Go* (Niantic, 2016) has no in-game communication feature, which means that players have to communicate face-to-face or through other media. Hence, *Pokemon Go* (Niantic, 2016) players prefer to co-play the game to highlight its social aspect. Probing further, an explanation of gameplay is sufficient.

Due to the pervasiveness of the game, players need to move outside their houses to maximize game enjoyment. If players want to succeed within the game, physical activity is required. Since players are encouraged to go outside, players are enabled to interact with each other face-to-face, instead of through online communication while gaming. This offline sociability amongst players brought by the online game is relevant to this study since an online game brings a variety of people physically together in an offline sphere. In other words, through an online game, players with different demographics interact with one another in an offline environment. This study is particularly interested in the fostered offline interaction and offline relationships between players brought by the online game of *Pokemon Go* (Niantic, 2016). This intertwinement of online and offline atmospheres is a unique

phenomenon in gaming and has everything to with the pervasive nature of the game. A more detailed explanation is provided in section 2.1 of the theoretical framework of this study.

1.2. Pokemon Go and The Netherlands

This research has a focus on the Netherlands for a specific reason. Four years after the release date, *Pokemon Go* (Niantic, 2016) still seems to be very lively within the Netherlands. This statement of active longevity of the game comes the following statistics. The official Dutch *Pokemon Go* community counts over 8000 members (Pokemon GO – De grootste Pokemon Go community, 2018). Even though this does not seem as much, *Pokemon Go* (Niantic, 2016) counts around 300 more communities divided over all twelve provinces of the Netherlands (NWTV-redactie, 2020). The province of Noord Holland, which is the province of Amsterdam, contains the most communities, which are around 60 different *Pokemon Go* communities (NWTV-redactie, 2020). All communities are active on a plurality of online platforms, but the largest online community is active on Facebook and represents over 29000 Dutch *Pokemon Go* players (Pokémon (GO)-community, 2017). Besides a wide variety of Dutch online communities, there are still multiple groups of *Pokemon Go* players strolling through the outdoors to catch all the Pokemon (Zorthian, 2016). The Netherlands adapted quickly to the social and physical impact of the game, multiple *Pokemon Go* events such as community days and legendary Pokemon release days were held, local pastry shops started selling Pokemon-themed pastries, and the Pokemon ice-cream became a national ice flavor (Lundberg, 2016). The abundant number of communities and a large number of players is why this study is interested in how players experience the game.

According to the statistics mentioned above, the *Pokemon Go* community is vast and widespread over the Netherlands and counts many active members. With multiple Facebook pages devoted to the Dutch *Pokemon Go* community, Dutch players communicate with each other online, and later on offline while playing the game together outside (Pokemon Go Nederland, 2015). Facebook is often used by players to make plans with other players to play the game together outside (Pokémon GO, 2020). Here we see how both online and offline social relations exist coexisting. This phenomenon is common for friends planning to play *Pokemon Go* together, and to plan their trip carefully with specific geographical places according to where the rarest Pokemon is to catch at that specific time (Pokemon Go Nederland, 2015). Players plot their Strategies, and the online community will continuously update players on where what Pokemon has had appeared. If players have no one to go with or none of their friends play the game, joining one of the local *Pokemon Go* groups nearby is

natural (Pokémon GO, 2020). With all the Facebook pages, it is easy to become a member and to find players through the online community to play and go on adventures with. In order to explore what exactly happens when people meet and play the game together and interact with each other, interviews with *Pokemon Go* (Niantic, 2016) players will be conducted to get an in-depth and grounded understanding of these fostered social relationships and interactions.

1.3. Research Question

This thesis is a case study about *Pokemon Go* (Niantic, 2016) and how gamers experience social relations with other players online and offline while playing the game. The general research question is:

> *How do Pokemon Go players in the Netherlands experience social relations online and offline by playing the game?*

Several sub-questions are formulated to study the topic. The sub-questions are served as thematic steps in order to answer the main research question more coherently.

> **Sub-Question 1:**
> *How do Pokemon Go players interpret sociality and sociability through online and offline social interactions?*

With this sub-question understanding of how social interaction is formed and fostered among players. This question also provides insight into how players act to other players and how players communicate. It is crucial to understand since social interactions form the base of social relations. Since this study is interested in how an online game brings people together in an offline sphere, this sub-question helps to understand how players engage in this offline sphere of communication. Also, Online and offline social interactions are distinguished through this sub-question, which is necessary to understand the variety in player's experiences with different relationships.

> **Sub-Question 2:**
> *How do Pokemon Go players interpret social relationships developed by playing the game?*

The concept of social relationships is subjective as it comes with a plural set of interpretations. With this sub-question, clarity and understanding of the concept and its different interpretations will be provided according to the player's experiences. Moreover, with this sub-question, a division in online and offline relationships, and old and new relationships are created. Therefore, through critical reflection, the differences, similarities, and the relationships between the two types can be analyzed, discussed, and explained.

Sub-Question 3:

How do Pokemon Go players use the pervasive characteristics of the game to engage in social interactions?

Pervasive games require physical movement to enjoy the game successfully. Also, the missing in-game communication tool disables players to communicate online through the game. Both physical exertion and social interaction with other players serve as player's motivations for gameplay. This sub-question will be discussed in the first section of the theory chapter, by an elaborate explanation of pervasive game characteristics with augmented reality, and how the game nature is linked to player's sociability.

1.4. Academic Relevance

Previous studies on gaming and social relations have been focusing on how users create and maintain relationships through gaming (Kowert, Domahidi, & Quandt, 2014; Cole, & Griffiths, 2007; Domahidi, Breuer, Kowert, Festl, & Quandt, 2016; Jansz, & Martens, 2005). Research predominantly focuses on how gamers act and behave in these social relationships (Kowert et al., 2014; Kowert, Vogelgesang, Festl, & Quandt, 2015). However, less research is conducted on how gamers experience social relationships. However, this does not mean there has been no research on this topic at all. Hence, studies do state that gameplay can be used to strengthen, enhance or foster offline relationships (Durkin, & Barber, 2002; Wang et al., 2018; Yang et al., 2017; De la Hera, Loos, Simons, & Bloom, 2017; Alencar & De la Hera, 2018; Jansz, & Martens, 2005). However, the games used as examples in these studies are often multiplayer online games (Cole & Griffiths, 2007; Coan, Mugellini, Abou Khaled, 2013). Contrary to previous studies, the study focusses on *Pokemon Go* (Niantic, 2016), a single-player online pervasive game. Additionally, this study focusses more on gamer's experience with social relationships, which is a less discovered subject by academia.

Oppositional to studies stating that gaming has a positive effect on social relations, other scholars coin a negative correlation between social relationships and gameplay (Shen & Williams, 2010; Utz, Jonas, & Tonkens, 2012; Kneer, Rieger, Ivory, & Ferguson, 2014). Hence, engrossing gameplay could disrupt offline social relations for gamers, which can be problematic because game players often replace offline social relations such as friends for online virtual substitutes (Shen & Williams, 2010). Moreover, research shows that addictive gaming could result in having wicked social ties, a lack of friends, having personal problems, and family-related stress (Kneer et al., 2014). Therefore, this study tries to explore how *Pokemon go* players experience engagement within social relations while playing the pervasive game

Studies often compare gamer's online and offline social relationships (Orleans & Laney, 2000; Schaap, 2002; Griffiths et al., 2004; Jansz & Martens, 2005). Modality in switching communication from computer-mediated-communication (indirect) to face-to-face communication (direct) could harm offline social relationships between individuals since the nature of relational communication has been changed (Ramirez & Zhang, 2007). However, *Pokemon Go* (Niantic, 2016) encourages players to interact offline since it does not facilitate an in-game communication tool. Moreover, online communication is only available through outsourced media platforms. Therefore, there is hardly a replacement of offline for online relationships but rather a coexistence (Kasapakis & Gavalas, 2017). Besides, offline relationships are often prioritized by players of the online game of *Pokemon Go* (Niantic, 2016). Therefore, this research differs from previous studies on offline game relations since offline relationships play a different role when analyzing *Pokemon Go* (Niantic, 2016).

Generally, due to its popularity, *Pokemon Go* (Niantic, 2016) has been an exciting topic for recent game research (Wang et al., 2018; Vella et al., 2017). However, the general focus of previous studies is on gameplay motivations. Other *Pokemon Go* studies focus on city tourism, which is originally more aligned with the nature of the game (Wang et al., 2018; Yang et al., 2017). However, how the pervasive nature of *Pokemon Go* (Niantic, 2016) connects to the player's experiences with online and offline social interactions is rather unexplored in academic studies. Therefore, by analyzing how the players of *Pokemon Go* (Niantic, 2016), experience social relationships, knowledge will be added to the research field of game studies.

1.5. Social Relevance

Pokemon Go (Niantic, 2016) is a pervasive mobile game app that can only be enjoyed through GPR, designed augmented reality, and physical exertion of its users. The game reached over 500 million citizens globally (Statista, 2016), and monitor 750 million downloads worldwide within the first year of (Nelson, 2018). Besides its commercial success, *Pokemon Go* (Niantic, 2016) also has a changing impact on its players. The game stimulates players to move outside their dorms and brings different people together (Tateno, Skokauskas, Kato, Teo, & Guerrero, 2016).

Since 2016 when *Pokemon G* (Niantic, 2016) entered the market, people all over the world started using the game and started to participate within the online Pokemon (G) community actively (Iqbal, 2020), this resulted in a 1.8 billion dollars revenue in less than two years (Nelson, 2018). Even though the popularity and success of the game, *Pokemon Go* (Niantic, 2016) and pervasive games in general, are rather still unexplored. Within pervasive games, a merging sphere of both online and offline reality is created (Hamari et al., 2018; Kasapakis & Gavalas, 2017). Thus, it is a game that represents the interaction between the experience of the 'real-world' environment incorporated with gaming elements.

How the offline and online worlds merge with *Pokemon Go* (Niantic, 2016) is visible in the Dutch gaming situation. The game is played in over 300 Dutch groups of people who move together to different places to catch all the Pokemon (NWTV-redactie, 2020). These groups are commonly formed through Facebook or one of the more local WhatsApp chats (Pokemon Go Nederland). Another way of group formation is for players to meet each other while playing and pair up, or friends decide beforehand to play outside together (Manifest, 2018). In 2019 the majority of players acknowledged playing for 1 to 3 hours a day. Almost 70% of the players implied preferring to play with others outside (Iqbal, 2020). Even though the game stimulates offline interaction, which is acknowledged by its players, *Pokemon Go* (Niantic, 2016) is also strongly represented online. Even after four years of its release, the game is still growing in popularity and lively in the Netherlands. With 300 communities with over 2500 members averagely per community (Pokemon Go Nederland), *Pokemon Go* (Niantic, 2016) is a hot topic in discussions among gamers. With an overarching Dutch Facebook community which counts 29000 contributing members, it is stated that a lot of Dutch citizens are somehow connected to and interested in the game (Pokemon (GO)-community, 2017; NWTV-redactie, 2020). As presented, *Pokemon Go* (Niantic, 2016) has a lot of Dutch players who are actively interacting with each other, both online as offline.

Therefore, this study has an interest in exploring how players experience social relations coming from playing *Pokemon Go* (Niantic, 2016).

1.6. Chapter Outline

The first chapter of this thesis contains the introduction. This section presents the phenomenon of *Pokemon Go* (Niantic, 2016), the situation of the game in the Netherlands, the general research question of this study, and the academic and social relevance.

Chapter 2 will present the theoretical framework, and this chapter is divided into three sections. Section 2.1 pervasive gaming concerning social relations will cover a clear understanding of what pervasive gaming means and how players engage, which both online as offline relations through pervasive gaming. Section 2.2 will focus on social relations and gaming, here theories about how social relations are fostered and created by online gaming will be discussed. The last section 2.3 is about offline and online relations, the differences between these relations, and the role of gaming and specifically pervasive games within these relationships.

Chapter 3 presents the methodology of the study. This chapter describes the qualitative methods of in-depth interviewing and will justify why this method is used. It describes the executed data collection coherent to this study. Moreover, it also explains this study's sample and describes the operationalization of how this study is conducted and executed. This is followed by the explanation of the executed process of data analysis. Lastly the validity and reliability of this study is discussed.

In chapter 4, the results are presented and discussed. Here the link to theory and data stemming from the interviews will be critically discussed. Each section of the results is linked to a sub-question and reflects on coherent theory. The results chapter has four sections, each linked to one of the three stated sub-questions of this study.

Chapter 5 presents the conclusions of this study. This chapter includes the main findings, theoretical and social implications, limitations, and suggestions for future research. With this final chapter this study is concluded and finished.

2. Theoretical framework

This chapter discusses relevant theories and theoretical concepts related to this research. Section 2.1 elaborately highlights pervasive gaming, augmented reality, their relations to social interaction, and how specific game design can stimulate the player's social interactions. Section 2.2 focuses on social relations and, more specifically, how gameplay and sociability are connected and discussed by academia. Section 2.3 discusses on-and-offline game relationships, the differences between the types, and the effects one can have on the other and how they are practiced and intertwined. Throughout the different sections, an explicit connection to *Pokemon Go* (Niantic, 2016) is provided.

2.1. Pervasive gaming and social interaction

This section brings understanding of the concepts of *pervasive gaming* and *augmented reality gaming* in order to get a better understanding of the game design and practices of *Pokemon Go* (Niantic, 2016). After providing a framework with those two concepts, the social aspect of gaming is presented concerning *Pokemon Go* (Niantic, 2016).

Augmented reality gaming

Our world and daily lives have been invaded and saturated by digital technologies. Our gadgets and technological devices touch upon almost every aspect of our lives by being deeply rooted and intertwined in our everyday practices (Liberati, 2017). These devices accompany us and enhance us by providing all the information we need, by storing and monitoring all our data for daily schedules, and they simplify keeping in touch with our loved ones by being continuously active around, and along with us (Liberati, 2017). This investment and intertwinement between our everyday lives and technological devices are only growing to become more pervasive, until our world is becoming inhabited by digital elements and entities generated by technology, like if we live in augmented reality (Furth, 2011). This specific technology of augmented reality was introduced in the '90s, ever since a lot has changed within this technology field. Changes have led to now 30 years later, millions of people use an interpretation of augmented reality all over the world in the form of *Pokemon Go* (Ninantic, 2016). With augmented reality, it has become possible to combine digital objects with the objects in our real surroundings (Javornik, 2016). Relevant to this study is the game results in merging digital and real-life objects through gameplay. Hence, this technological improvement takes the gaming perspective to an outside realm, in which

gamers have to go outside their houses to play the game (Valente, Feijó, & Leite, 2015). With this change in the gameplay environment, different forms of social interaction can co-exist. Hence, gamers are brought together physically through gaming instead of purely online (Valente et al., 2015; Magerkurth, Cheok, Mandryk, 2005).

The opportunity for players to game together outside through augmented reality has been increased recently. Hence, not-so-long-ago augmented reality mobile apps have entered the customer markets (Rasche, Schlomann, & Mertens, 2017). These apps are mobile game apps, a type of media in which digital information is integrated and transmitted in the physical world (Javornik, 2016). Craig (2013) describes and defines augmented reality games as a form of media in which a construction of digital information overlays our physical world that is in both a spatial as a temporal registration of our physical world that is as well interactive in time. Since this is a somewhat technical definition of augmented reality, research also states it as a game through which a user can experience and explore the world with virtual objects implied in the real world through gameplay (Azuma 1997; Javornik, 2016). Hence, to avoid being confused with virtual reality, augmented reality is not closed off from reality but instead melds or includes virtual elements with reality (Javornik, 2016).

Augmented reality games can potentially influence the physical activities of possible players, by adapting the sedentary nature of gameplay towards a somewhat more physical nature (Lago, Cai, Boer, Kruchten, & Verdecchia, 2019). Augmented reality games refer to the hyper-interactive coexistence of both computer technology generated elements within our real psychical world (Azuma, 1997). Such coexistence of two worlds creates a rather unusual and unique opportunity for video games and gameplay, since now the nature of video gameplay can be challenged (Hamari et al., 2018). This challenge is central to this study. Hence, it brings new insight into social interactions and relationships and the game environment. More explicitly, an offline sphere has been added to the possible social interactions online gamers can enjoy with others while gaming. This, because there is no longer a gameplay that is restricted to a fixed place. Matter of fact, *Pokemon Go* players are encouraged to go outside together to play the game. This specific motion is of importance within the analysis of this study.

While augmented reality games grow in popularity, consumer research to augmented reality games remains a rather scarce domain (Rauschnabel, Rossmann, & tom Dieck, 2017). Especially research with a focus on the social aspect of augmented and pervasive gaming. That is why this study focuses on how players experience social interactions through playing the game, with the augmented and pervasive nature of the game in specific consideration.

Pervasive gaming

Pervasive games include experimental game designs that engage with both technological development and everyday space. These games stimulate players to move through the physical world. In return, the game delivers gaming experiences adaptable to where they are, and what they do (Kasapakis & Gavalas, 2017). Pervasive games have different forms and types. However, the main required shared characteristic all types have in common is merging the digital and physical world (Magerkurth et al., 2005).

As briefly explained above, pervasive and augmented reality games generally focus on overlapping digital content and everyday surroundings. As a result of this, created hybrid spaces of physical and digital worlds occur (Hamari et al., 2018). Thereby, through pervasive games created, hybrid places have become social environments for many users of the games. Players are encouraged to go outside to play. Hence the games facilitate opportunities to socialize with friends, bond with family members, and make new connections with strangers and other players (Hamari et al., 2018). These opportunities come from the communication elements pervasive games behold. Communication is either face-to-face with other players (direct) or using technology as a mediator for communication (indirect) (Valente, Feijó, & Leite, 2015; Magerkurth et al., 2005). In concrete, indirect communication does not include any physical communication but is commonly chatting online with other players. The communication aspect of pervasive games is a quality that is related to how the games foster or promote social communication for and among its players (Valente, Feijó, & Leite, 2015). However, the main focus of pervasive games concerning social interaction is promoting direct offline interaction between players (Coan et al., 2013; Magerkurth et al., 2005). This form of communication commonly exists out of small talk between players or strategic discussions on how to successfully play to the game (Coan, Mugellini, & Khaled, 2013). It is relevant to this study to distinguish how players experience online and offline social interaction with other players. Therefore, the communication aspect of pervasive gaming is of high importance within the analysis of this study. Besides, *Pokemon Go* (Niantic, 2016), does not facilitate an in-game communication tool, which makes the online relationships fostered through the game an exciting topic for research.

The social aspect of pervasive games

According to Valente et al. (2015), indirect communication is not present nor possible in every pervasive game design. For example, *Pokemon Go* (Niantic, 2016) does not facilitate communication possibilities within the game due to its single-player mode and characteristic

of pervasive gameplay (Hamari., 2018; Valente et al., 2015). Pervasive single-player games such as *Pokemon Go* (Niantic, 2016), promote direct communication. Players are encouraged to go to specific places with many other people to play the game, which pushes them to interact with each other and engage within social relations (Vella et al., 2017).

Through playing pervasive games together, the interactions and relationships become more tangible between players. Therefore, players often perceive relationships as more present (Magerkurth, Cheok, Mandryk, & Nilsen, 2005). Scholars show, according to responses of conducted surveys for game players, that players generally acknowledge different motives for playing *Pokemon Go* (Niantic, 2016) (Wang et al., 2018; Yang et al., 2017). The most relevant motives, according to these specific studies, were friendship maintenance and relationship initiation and achievement (Yang & Liu, 2017). Through augmented reality and the spatial connectedness with other players, research showed that *Pokemon Go* (Ninantic, 2016) confirmed a feeling of community due to social connection users have experiences with other players as well as an increased degree of physical activities (Yang & Liu, 2017; Zach, Tussyadiah, 2017). Also, *Pokemon Go* (Niantic, 2016) has been used as an icebreaker to ignite conversations with strangers and other players (Yang, & Liu,2017). Hence, the practicalities of encouraging players to interact offline.

As mentioned above, *Pokemon Go* (Niantic, 2016) somehow evokes social interaction. However, now the question arises: What is it about the game that encourages these interactions? Research states that by just designing and using networked devices and co-located players playing a location-based augmented reality game, it does not particularly guarantee increased social interaction among players (Szentgyorgyi, Terry, & Lank, 2008). However, these games do create among players shared one-to-one mapping between the digital game space and the physical space. This one-to-one mapping builds a common ground for players, which they can perceive as inviting to socialize with other players they run into (Szentgyorgyie et al., 2008; Tateno, Skokauskas, Kato, Teo, & Guerrero, 2016). Augmented reality and pervasive games do not guarantee increased social interaction between players. However, it does stimulate social interaction by providing an inviting atmosphere (Mulloni, Wagner, & Schmalstieg, 2008; Tateno et al., 2016).

So, besides its technological aspect, augmented reality and pervasive games also have a shared core element of social interaction. Since players are all physically playing in the same offline environment equipped with their device needed to play the game. Therefore, the social mechanics of real-world interaction can be preserved and ignited by players (Mulloni et al., 2008). This study provides a clear insight into how players experience this sketched

environment, which is, according to theory, perceived as inviting for social interactionism (Mulloni et al., 2008; Tateno et al., 2016). This study focusses on the players' perspective on and experiences with the optional brought social interactions.

2.2. Social relations and gaming

Within this section, the social aspect of gaming is assessed. Theoretical concepts such as *sociality* and *sociability* are explained to understand the correlation between gaming and players' social interactions and relationships. Furthermore, according to multiple studies, this section highlights how gaming can be seen as a modern translation of the term sociability. Moreover, this section discusses different theories and perspectives of scholars on the impact of gaming on player's sociability. Finally, this section shows the link between the player's sociability and *Pokemon Go* (Niantic, 2016).

Sociability

When studying social relations and gaming, first attention must be on the concept of social relations separately from gaming to make it more understandable and more comfortable to link to the gameplay. Understanding social relations focuses on how social relations are formed and what purpose and function they serve to individuals and communities. Simmel (1997a, 1997b) in the previous century explained the concept of '*sociality'* which is the process of individuals living together in an organized way as society or community. Sociality is the community's function and for individuals the reason to contribute to a community (Amirou, 1989). This formation of community and society comes with social ties and interaction between individuals who collectively construct the community. The phenomenon of living together within a group is seen and explained as 'socialization'. Socialization is the non-spontaneous process that goes from one generation to another generation, through this shared history individuals share and internalize norms, information, symbols, knowledge, beliefs, and behavior (Costa, 2013). This specific set of attributes is shared, learned, and accepted by all the members of the same community they belong to (Curcio, 2005; Simmel, 1950).

Larsen (2006) discusses '*sociability'* described as the pure interaction between, in theory, equal individuals of a shared community for the sole purpose of simply enjoying each other's time. An example by Simmel (1997a, 1997b) is the shared communal meal family and friends often have at night. Eating together is an activity in which often each other's company is enjoyed, and social interaction takes place. People share their thoughts and experiences of

the day over a shared dinner. This shared enjoyment of leisure time is the definition of sociability. According to studies, individuals engage in sociability when the interaction with others is void of meaning and purposes, this is best possible and enjoyed when they are entirely ourselves and relaxed while interacting (Simmel, 1997a & 1997b; Eklund, 2012, 2015).

The term sociality is often replaced with sociability or defined as *'(social) reality'* and that the purest form of sociality is one's reality the individual lives in (Croce, 1945; Berger & Luckmann, 1966). Sociality, as the process of individuals living together in an organized society or community, is similar to an individual's '*reality'*. We all live and contribute to society and the community, which makes it similar to reality. Hence, we all live and interact in society, and we all (un)consciously contribute to our communities. Even though both concepts are often mistaken, sociality expresses more a feeling of community and togetherness where sociability is the practice of interaction, which makes individuals connected. Nevertheless, both theories are used to represent the same definition. Hence, the pure interaction between equal individuals of a shared community (Simmel, 1997a; 1997b; Croce, 1945; Berger & Luckmann, 1966; Curcio, 2005; Larsen, 2006; Costa, 2013). This dissertation focusses primarily on the concept of sociability, in terms of how players interact with each other over a shared interest, within this case *Pokemon Go* (Niantic, 2016), and through how this shared activity of gaming is experienced in terms of social interactions and relations. This research conceptualizes sociality according to how a selection of players forms a community. How players feel about relationships with other players is also a measurement of sociality. However, the overarching focus is on the concept of sociability, since it is more applicable for all players.

Sociability and gaming

To give clarity of why the concepts mentioned above are essential to understand, a bridge between the grounded theory of Simmel (1997b) concerning sociability and modern theories on gaming and social relations (e.g., Eklund 2015; Blinka, 2015) will be presented to provide an insightful theoretical framework. Moreover, gaming can be seen as an interpretation of the communal dinner, through which people connect, share their stories, and practice interaction over gaming. Thus, the gameplay is the phenomenon that brings people together and bonds players to each other. Making the comparison presents that gameplay and social relationships are not a new phenomenon, but a new way of leisure time people has shared for ages. Thus, gameplay is the modern interpretation of the concepts of sociability.

Eklund (2015) states in her research that gamers engage in practices of sociability over gaming. This pure pleasurable form of interaction between players is void of meaning and purpose. Eklund explains that communication is at its optimum when we enjoy ourselves and are relaxed. Hence, the similarities of the communal dinner explained by Simmel (1997a, 1997b). However, games and, more specifically, game designs play an essential role in facilitating sociability between players. Games with a communicative artifact or a communication feature are designed to promote the player's social interaction or to evoke the need for players to interact with one another (Eklund 2012; 2015). For these reasons, we see the role of the game design in supporting and enabling sociability. Sociability in gameplay beholds a game design concerned with planning and developing social policies and supporting social interaction (Eklund, 2012; 2015; Hew, Gibbs, & Wadley, 2004; Blinka, 2015). However, this phenomenon of implemented opportunities comes with a form of usability in games.

Sociability and usability are two intertwined concepts but are very important to be understood separately but with a mutual dependency when discussing in-game social interaction (Hew et al., 2004; Yee, 2009). First, the differences between both concepts will be explained concerning online games. Usability is the social interaction between players and an in-game technological artifact enabled by game design. Sociability is the social interaction between players through an in-game technological artifact. These two concepts are also explained as '*designed sociability*' the social architecture/structure of the game (*usability*) and '*played sociability*' the way players of the game behave and interact with each other (*sociability*) (Eklund, 2012; Hew et al., 2004). Played sociability is crucial for players' online social life (Simon, Boudreau, & Silverman, 2009), where designed sociability is vital for the encouragement of interaction for players. Generally, sociability emphasizes the importance of interaction between users and the game design and the interaction between users within the game. This phenomenon is interesting to navigate when discussing social relations since interactions are crucial when fostering or maintaining relationships.

However, in order for a game design to succeed in supporting players' interaction within the game, media technology needs to be explicitly executed and approachable for users. An example of this is X-box live and designed Microsoft voice communication, which enabled players to talk to each other live when playing online video games (Hew et al., 2004). This specific example highlights the comparison of online and offline sociability. According to Blinka (2015; 2016), Online sociability of gamers functions somewhat highly similar to sociability in the offline real-life world and is therefore independent of its

environment. According to multiple studies, it does not matter whether the communication between players takes place online or offline, the only thing that matters for individuals is their usability (Simon et al., 2009; Blinka, 2015; Blinka, Škařupová, & Mitterova, 2016). Since this study is interested in online and offline social interaction, it is vital to analyze if players indeed experience similar sociability in online and offline relations.

As presented above, sociability is crucial in game studies that focus on how online gamers interact. For this dissertation, gamers' sociability is analyzed to provide insights and understanding of how *Pokemon Go* players experience interaction with other players online as offline. The next part will focus on how social interactions among gamers are formed, and whether gaming is perceived positively or negatively on gamers' sociability.

The social context of gaming

The social context of gaming and its coherent social relations and interactions is a well-discussed topic within game studies (e.g., Shen & Williams, 2010; Utz, Jonas, & Tonkens., 2012; Kowert et al., 2014; 2015; Kneer et al., 2014; 2018).This section focusses on how digital games mediate social interaction among players. There is an ongoing debate on two contradictory perspectives on the effects of gaming on the social relations of its players in game studies. First, the negative perspective on the effect of gaming on social relations will be discussed in this section. Kneer et al. (2014), explains that addictive gaming could negatively affect gamers' sociability and that destructive gaming often results in having a lack of offline friends and bad social ties. This could, later on, result in personal problems and family-related stress. Hence, especially family ties are often jeopardized by addictive online gaming (Griffiths & Hunt, 1998).These findings complemented by other studies focusing on non-addictive gamers, which show that gamers often displace time from offline social interactions to online interactions, claiming that this could disrupt offline social relations for gamers (Shen & Williams, 2010). Utz et al. (2012) demonstrate that destructive players often have less offline friends than light or non-gamers. Hence, gamers often substitute instead of complimenting their offline relationships with online relationships (Shen & Williams, 2010; Utz et al., 2012). Gamers tend to share problems concerning social and emotional issues faster with distant online friends than with their offline relations (Domahidi et al., 2016).

Contradictory, other studies claim a positive perspective on gamer's sociability (Cole, & Griffiths, 2007; Domahidi et al., 2016; Hamari et al., 2018; Kneer, Jacobs, & Ferguson, 2018). Some scholars state that gaming is a social practice and that gamers consider video gameplay as a social event (Cole, & Griffiths, 2007; Ferguson & Olson, 2013; Kneer et al.,

2018). Kneer, Jacobs, and Ferguson (2018) also state that one of the motivations for players of online games is the '*social relatedness*,' which highlights the opportunities for gamers to bond with other players over gameplay. Games are often perceived by players as an easy medium to hold conversations online with other players and make new '*friends'* or social connections (Sublette & Mullan, 2010; Hamari et al., 2018). Cole and Griffiths (2007) coined that players experience making friends online as easier since they do not face the social boundaries they experience in the offline world. Moreover, gaming is perceived as a possibility to make new friends and seen as a tool to strengthen existing friendships (Kowert et al., 2014). Besides, research also rejects the assumption that gamers commonly have little offline friendships (Domahidi et al., 2016). Additionally, the study shows that online gameplay does not generally evoke negative consequences on the player's offline sociability (Domahidi et al., 2016). However, Kowert et al. (2015) also state that gamers often seek sociability online to compensate for their pre-existing social difficulties. As presented above, whether or not gaming can be perceived positively or negatively for gamer's sociability is an ongoing academic discussion. Through focusing on players' experiences, insights, and understanding of the role of *Pokemon Go* (Niantic, 2016) and player's sociability can be provided. According to analysis, a decision can be made, which part of the discussion applies to the phenomenon of *Pokemon Go* (Niantic, 2016).

However, differently from previously mentioned studies, this research has no focus on motivations for players to play online games. Hence, the focus is on how *Pokemon Go* players engage in social interactions by playing the game and experiencing social relations. *Pokemon Go* (Niantic, 2016) is an interesting case due to the absence of designed sociability. However, played sociability of *Pokemon Go* (Niantic, 2016) has taken an outside game characteristic, which means that communication, bonding, and fostering of social relationships between players has shifted to an offline dimension. Also, this study tries to explore how players practice sociability. Who go outside together in groups and how is leisure time enjoyed together. How did these groups of players occur, and what type of social interactions are made, and lastly, how are social relations formed and maintained? Hence, again the relevance and presence of the pervasive nature of the game. The next part will focus on fostered social interactions and the differences between online and offline communication.

2.3. On-and-offline game relationships

This section dives into different forms of social interactions and relationships. By separating online and offline communication between players, understanding of similarities and differences between online and offline relationships between players are presented. Moreover, by separating the online and offline spheres, an understanding of correlations between relationships is provided.

Online VS offline

Even though, as earlier mentioned, some studies claim that gamers often prioritize online relations over offline relations (Shen & Williams, 2010), and addictive gaming can put relations with friends and family at risk (Griffiths & Hunt, 1998). However, Jansz and Martens (2005) oppose these findings, stating that gaming can lead to the production of new offline relations, for example, within families, especially between fathers and sons. Previous research shows that gaming can occasionally produce new or strengthen existing bonds within family and friend relationships (Durkin & Barber, 2002; Jansz & Martens, 2005). On top of that, research also presents how game players developed new social relationships both offline within their gaming peer groups (Orleans, and Laney, 2000; Jansz, & Martens, 2005) as online with other online gamers (Griffiths et al., 2004; Schaap, 2002). The study did notice a difference within these held conversations. Online game-related communication tends to have a more realistic and game-related character, where offline interaction often entails personal or emotional conversations (Coan et al., 2013; Valente et al., 2015). Both of these forms of relationships are very relevant to this research. Regarding the offline relationships within peer groups, this study means how *Pokemon Go* players interact with each other through direct communication. How they discuss the game and communicate with each other face-to-face either while playing the game together. Online relationships entail communication between players through a medium such as Facebook and WhatsApp.

Blinka et al. (2015; 2016) state that sociability is independent of its environment and players will find a way to communicate one way or another since both online and offline sociability are very similar and, therefore, easy to substitute by each other. This would insist that there is no difference in players' experience between online and offline relations. Contradictory, study shows that increased online communication does not have to result in increased connections or enhanced relationship with that person offline (Pollet, Roberts, & Dunbar, 2011). So, an online relationship does not have to succeed or match the offline substitute. Moreover, online and offline relationships are experienced differently by players.

Therefore, the separation of online and offline relationships is required in order to understand them individually.

Nevertheless, research shows that individuals who spend more time on social network sites/social media have a more extensive social network (Pollet et al., 2011), which means that they have more social connections and interactions with others online in comparison to people with a smaller social network. This is quite stating the obvious. However, having a more extensive social network or devoting more time to online social networks says nothing about the quality or the strength of those social ties and relationships (Hew, Gibbs, & Wadley, 2004; Pollet et al., 2011). Study shows that intensive online relations do not have to strengthen or improve the same relation in an offline sphere (Pollet et al., 2011; Blinka, 2015; 2016). This is interesting in the case of *Pokemon Go* (Ninantic, 2016) since people do not have the opportunity to talk online within the game, online communication is outsourced to other platforms. Therefore, communication is only possible online via social media or offline in person. It is interesting to see how players experience the differences in offline and online communication and relationships and how they affect each other. Since changing the communication nature of a relationship can impact the experience and the valuation of that particular bond (Ramirez & Zhang, 2007).

This research has an interest in exploring the differences in the online and offline community of *Pokemon Go* (Ninantic, 2016). Studies show that both communities serve different purposes and are used and valued differently by its members (Orleans & Laney, 2000; Jansz & Martens, 2005; Griffiths et al., 2004; Schaap, 2002; Pollet et al., 2011). To understand, this study analyses players' experiences to provide insights into the difference between online and offline relations and its coherent communities.

3. Methodology

This chapter presents a comprehensive overview of the methodology applied to research how *Pokemon Go* players experience social relations. This methodology section presents an overview of the concrete steps of how this research is conducted. In order to do so, the following sections discuss the research design (section 3.1), the data collection (section 3.2), the sample (section 3.3), the operationalization of concepts (section 3.4), the analysis of the data (section 3.5), and finally the presentation of the study's credibility and validity (section 3.6).

3.1. Research Design

For this study, qualitative research has been conducted according to semi-structured in-depth interviews. According to Brennen (2007), within media studies, a qualitative researcher is executed to understand relationships that exist within media and society. This approach suits the aims of this specific research. This research is an exploratory research on the case study of *Pokemon Go* (Niantic, 2016) and focused on understanding how the online game is used by players to engage within offline relationships as well as online relationships. The offline relationships central to this research are the relationships created by playing *Pokemon Go* (Niantic, 2016). A qualitative approach to the case study allowed the researcher to grasp upon and gain an in-depth understanding of both the meaning-making process and interpretations of the social relationships of participants. According to Brennen (2007), qualitative research is required to do so since qualitative research studies cultural practices through which people make meaning out of their lives. For this research, qualitative research helped to provide an understanding of how and why *Pokemon Go* players engage in both online as offline relations through playing *Pokemon Go* (Niantic, 2016). Therefore, the method of in-depth interviewing is used for this study. Through interviews, insight is gained in how *Pokemon Go* players experience social relationships online and offline, and how they experience their engagement while playing.

3.2. Data Collection

In-depth semi-structured interviews are used in this study as a data collection research method to gain a more in-depth understanding of how players engage in both online and offline social relationships through playing *Pokemon Go* (Niantic, 2016). Researchers use interviews to understand the context and meaning of information, experiences, and opinions

of interviewees (Brennen, 2007). This method emphasizes on understanding and gathering knowledge through specifically asking questions to get detailed information about attitudes, behavior, perceptions, and unfolding complex processes (Jones, 1995). Since the understanding, definition, and practices of the concept of social relationships applied differently for every participant, an in-depth interview provided a better and broader understanding of both the personal and subjective context of each participant's definition. Since interviewees spoke from different backgrounds and perspectives, a large and varied amount of information is gathered and used for the study (Brennen, 2007).

The interviews are all semi-structured, which means there was a following in questions with assigned probes. However, there was room for interviewees to talk about topics they want to highlight more explicitly and to go off schedule (Cohen and Crabtree, 2006). The flexibility of semi-structured interviews allowed the researcher to ask probes or follow up questions to delve more deeply into specific topics or to ask the participants to clarify themselves to create a better understanding (Brennen, 2007).

Due to the extraordinary circumstances brought by the COVID-19 crisis meeting with interview participants was no longer possible. Therefore, all interviews were held online. All interviewees were given the choice of either video or audio call. All participants had a preference for a phone call. Thus, it was no longer possible to gather any other data besides their voice and actual answers. Therefore, all possible non-verbal communication was outside research's observation, and therefore not part of the analysis.

The interviews were all recorded by the mobile phone under the full consent of the interviewees. All interviews were held in Dutch because all participants were from the Netherlands, which is aligned with the focus of this extensive research. This research has a specific interest in the Dutch situation of *Pokemon Go* (Niantic, 2016) and its players. In order to make the transcripts more relevant and understandable, quotes used in the analysis and codes gained from the interviews were translated by the author into English to conform to the requirements.

3.3. Sampling

This research is primarily focusing on the experience within social relationships through the pervasive game *Pokemon Go* (Niantic, 2016) of the respondents. The interviewing process was stopped after saturation was met; this was after the totality of twelve high-quality and in-depth interviews. Within this section, an overview of the recruitment and the sampling process of interviewees is presented. Remaining relevant

information on interviewees and the corresponding interviews are stated in the appendix (Appendix C).

In total, five interviewees were recruited through social media platforms devoted to Dutch *Pokemon Go* communities. Two of them were recruited through the Dutch *Pokemon Go* Facebook page, and the other three interviewees were reached through a variety of WhatsApp groups in which members all share their *Pokemon Go* experiences and details. The focus is on the Dutch Facebook group since the interest of this study is on the Dutch phenomenon of *Pokemon Go* (Niantic, 2016) and its players' experience of social interaction and relationships. The remaining seven interviewees were found through a so-called snowball sampling. The difficulties of recruiting respondents were increased because of the Covid-19 crisis. Therefore, the tactic of *snowball sampling* was used. Participants were used to recruiting more participants for the research (Flick, 2014). In order to generate a qualified selection of participants, snowball sampling was necessary. This approach to recruitment was convenient. Participants tend to be more willing when their acquaintances have participated as well. Due to the Covid-19 crisis, all interviews were held online. Online interviews can be perceived as somewhat distant or uncomfortable by interviewees. Through snowball sampling, this barrier was broken. With the help of acquaintances, newly recruited interviewees were comforted. This, combined with recruiting through social media, was implied to find participants for this research.

The interviewees suitable for this research had to conform to the following required criteria. Firstly, the most important criterion was for interviewees to have played or play *Pokemon Go* (Niantic, 2016) outside and in the company of other players. Secondly, participants of this research needed to play or have played the game *actively*, preferably outside in groups of players. This is necessary for them to be able to provide a considerable evaluation of their experiences, interaction, and engagement. Thirdly, interviewees needed to have played the game in the Netherlands. Hence the specific focus on the Dutch phenomenon of this study.

According to Statista (2016), the largest population of active *Pokemon Go* players are within the age range of 18 and 25 years old. However, this is a rather small age range, and also a relatively young population. Therefore, this research broadens the population of respondents from 22 to 40 years old. Except for one participant of 54, this participant was still considered relevant due to his experiences in playing the game with family members. According to theory, gaming could strengthen family ties, especially between a father and a son (Jansz, & Martens, 2005). The participant in question claimed to have interesting insights

and experiences with this theory and was therefore selected for analysis. This research included different genders since gender could impact the involvement in social relations, and also different motivations for engaging in social relations are more inherent to specific genders (Gore, Aseltine, & Colten, 1993). However, this research has no specific interest in finding differences between genders.

Nevertheless, a totality of twelve interviewees was recruited with a group of three female and nine male players. Also, interviewees with different nationalities have participated in this study. Similar to gender, different nationalities were included unintentionally. The focus of this study is on the Dutch phenomenon of *Pokemon GO* (Niantic, 2016). Therefore, respondents must be located in the Netherlands. Nevertheless, a mixture of Dutch (10 interviewees), South-African (1 interviewee), and Australian (1 interviewee) nationalities are represented.

3.4. Operationalization

Semi-structured interviews were designed to gain insight into how *Pokemon Go* players in the Netherlands experience social relations, both online and offline, by playing the game. According to different sections, questions were asked about the participants' experiences with social relations and the differences between and experiences with both online as offline relations fostered by playing *Pokemon GO* (Niantic, 2016). Therefore, a mixture between narrative and factual questions was presented throughout the entire interview. The interview guide used for the semi-structured interviews contained six different sections: 1. Introduction, 2. Social relation and gaming, 3. Community, 4. Online vs. offline relations, 5. Online relations, 6. Offline relations. An overview of the interview guide and its questions are presented in the appendix of this study (Appendix B)

Within this operationalization section, each section of the interview guide has been explained. Moreover, the connection of each section to the general research question has been discussed. The first section of the interview was used for introducing purposes. This section was necessary to get to know the interviewee better and make the interviewee feel more comfortable during the rest of the interview. Questions in this section were related to participants' first experiences with the game and opinions on both the game in general and the gameplay of *Pokemon Go* (Niantic, 2016). No direct relation to the general research question was constructed in this section. Therefore, the introductory section was rather short. However, due to this section, a particular player profile is pictured off each participant based

on their answers in this section. Later on, in the analysis, this seemed to be of importance since it impacted their experiences with social interactions with other players.

The second section of the interview guide existed out of social relations and gaming. In this section, the focus was on how interviewees experience the possible social interactions and relations they have had fostered through playing *Pokemon Go* (Niantic, 2016). Within this section, an interest in how social interactions and relationships were initiated is presented. According to Kneer, Jacobs, and Ferguson (2018), they state that one of the motivations for players of online games is the 'social relatedness', which highlights the opportunities for gamers to bond with other players over gameplay. This motion of bonding between players comes with social interaction and relationships. Therefore, to answer the research question, it is of interest to understand how participants experienced certain practices.

The feeling of social relatedness was an impressive bridge to the third section of the interview that focused on the *Pokemon Go* (Niantic, 2016) community that appeared to be of high relevance and importance for the majority of players. This section focused on how the community of *Pokemon Go* (Niantic, 2016) was constructed and how players felt about participating and contributing to the community. It also focused on what their motivations were for participating, and what opinion they had on community members and the community as a societal whole. By asking why participants decided or not decided to become a part of the community, insight was gained on social relationships between community members. Moreover, a difference in relationships were detected, and questions based on different motivations players have for participating in a *Pokemon Go* (Niantic, 2016) community.

When diving deeper into the phenomena of social relationships, it is crucial to differentiate online and offline relationships since they are perceived and experienced differently by interviewees. The fourth section, therefore, focused on the comparison and similarities of online and offline relations players have fostered. By asking participants for their preferences in social relations and why they experienced differences between relationships, a more insightful answer was provided to this study's general research question. It is essential to distinguish online and offline social relationships to answer how players experience social relationships through *Pokemon Go* (Niantic, 2016). Hence, to understand why the two forms are different or similar to each other. Within this section also a division in new and old relationships was introduced, because research states that through gameplay new online and offline relationships can be created and that it can strengthen already existing

relationships (Durkin & Barber, 2002; Jansz & Martens, 2005; Griffiths et al., 2004; Schaap, 2002).

Within this section, a specific focus was on online relationships. Moreover, this section focussed more extra on the construction and the type of communication concerning online relations. Due to player experiences, the characterization of specific online relations can be formulated and understood. This is crucial to provide a clear answer to the research questions since it focused specifically on online relationships separated form offline relationships.

The last section was similar to the previous one. However, the focus was on offline relationships. Within this section, a conversation was held on how players interact with other players while playing outside. How did the interaction with other players happen, and how did they feel about it? Later on, the interest was on *Pokemon Go* (Niantic, 2016) events or related community days. These are certain events that attract a large number of players, which results in a higher chance of offline interaction. These certain events generate a unique environment in which the game is enjoyed. This section was related to the research question since the nature of the game, which is bringing people together outside, came to practice. An elaborate discussion of how players interact with each other outside was, therefore, crucial in order to formulate a useful and insightful answer to the research question. By stating all these questions, an overview of how participants play *Pokemon Go* (Niantic, 2016), and their experiences with the game, their opinions on social relations, and the experiences with online and offline relations were gathered.

3.5. Data analysis

Data gathered through the methods of interviewing have been processed according to the protocol of thematic analysis and by the use of theoretical concepts and patterns stated in the theory chapter. By seeking, reporting, and retrieving information of the gathered data, the thematic analysis presents occurring themes (Braun & Clarke, 2006). Thematic analysis is used for this study. This systematic approach of data analysis is used to identify patterns within data (Braun and Clarke, 2006). If executed correctly, thematic analysis can describe the data set in detail and provide various interpretations of the research topic (Braun and Clarke, 2006). This method has been used to find patterns in participants' engagement in online and offline relations and will be multi interpreted.

Concerning thematic analysis, six steps need to be taken consistently (Braun & Clarke, 2006). The six steps of familiarity with data, the creation of initial codes, searching

for patterns, reviewing main themes, creating final themes, and reflecting on the overall analysis when finished (Braun & Clarke, 2006). Accordingly, to Braun & Clarke (2006), first, when all interviews were conducted and transcribed, an overview was created of which interviewee said what, and a list of topics was created. Hence, to get a better overview of all the data before diving into the analysis. Accordingly, initial codes were created and assigned to samples and quotes of the interviews. After concluding coding, the dataset, recurring patterns started to occur. Hence, this was the fourth step, after coding a search for patterns and pattern creations was constructed. This resulted in a more comprehensive understanding of the data. Accordingly, the patterns were transformed into themes. Since the patterns were the most prominent and relevant of the data set, they were transformed into themes used in the result section. For the fifth step, the themes were reviewed based on their quality and data consistency. All data assigned to the themes was checked whether they were in the right theme and if the theme is covering everything. When satisfaction was met with all themes, the completion of final themes was accomplished. For the final step, an overall review of the analysis was done, to check if everything was coherent and understandable for readers with a non-gaming or *Pokemon* Go (Niantic, 2016) background. The themes will be elaborately explained accordingly to introduce the theory and literature used for this thesis and are clustered in a coding tree (Appendix A). The findings of the gathered data will be derived over themes that are initially coming from both interviews and theory. From this data set, explanations, and answers to the research question were provided.

3.6. Validity and reliability

Qualitative studies should be convincing, reasonable, plausible, and persuasive (Silverman, 2011). Therefore, throughout the research, particular attention has been paid to the concepts of validity and reliability. Scholars claim that it is crucial and required to be radical and methodical when executing or conducting a qualitative study, this, in order to enhance the traceability of the results and to improve the understanding of the research (Nowell, Norris, White, & Moules, 2017). Nowell et al. (2017) were very determined and strict on meeting the criteria of trustworthiness when operating thematic analysis. Thematic analysis requires a working routine that is precise, consistent, and exhaustive (Braun & Clarke, 2006). If executed correctly, the research will be enhanced by credibility, confirmability, reflexibility, dependability, and transferability (Braun & Clarke, 2006; Nowell et al., 2017). In order to meet these standards for conducting a qualitative study and to ensure the quality of the research, a variety of measures and procedures were taken

seriously throughout the different research stages. Procedures such as pilot tests, self-reflexibility, power dynamics, ethical issues, and transparency are highly guaranteed. These procedures were handled as follows. When conducting in-depth interviews, a way to enhance the quality of the interview guide is by testing it beforehand, before executing the actual interviews. Therefore, for this specific study, pilot interviews were held with the thesis supervisor who had experience conducting interviews, previously to the actual interviews. This was done according to an interview topic list and several interview guides, till satisfaction was met. The pilot versions were specifically tested on the interview's coherence, the following, and the structure of questions, clarity, and jargon.

For the study to be coherent, precise, consistent, and exhaustive (Braun & Clarke, 2006), and to improve validity, the final categories and codes created through pilot testing were revised (Schreier, 2014). A coding tree was developed. Coding was done exhaustively, with mutually exclusive subcategories unidimensional categories (Schreier, 2013). This in order to create transparency and to ensure the validity and reliability of this study.

Other measures taking into account will be the role of power and reflexibility (Mauthner & Doucet, 2003). Scholars have stated that the level of professionalism of the researcher could influence the interview. This position could be affected by age, gender, occupation, and education (Richards & Emslie, 2000). The interviews for this study were free from any hierarchy, since no educational level, gender, or job occupation is required. All participants were equal to each other but also the researcher. Therefore, the behavior of the researcher was crucial. By coming too secure in its presence and knowledge, intimidation could have been aroused. Therefore, the researcher needed to interview in a conversational styled manner. Previous to each interviewee, the researchers explicitly explained that interviewees did not need any acquired knowledge, which balances out the power balance. This all in regard to balance the role of power between interviewee and researcher.

Moreover, as argued by Wong & Poon (2010), self-reflexibility is essential within the execution of qualitative studies. Interpreting interactions during the interview and personal thoughts concerning this research's central topic has been taken into account during the analysis since these are also important elements of the interview that might influence reflection (Wong & Poon, 2010). This is important, especially in trying to restrict the biased position of the researcher. Through previous knowledge, assumptions can be ignited, which could influence the conversation. For this reason, the presumptions of the researcher were constraint to the extent possible.

Moreover, every choice of the researcher in regard to the study has been contemplated. All choices made by the researcher can influence the outcomes of the study, especially the selection of interviewees, and the design of interview questions can impact massively (Wong and Poon, 2010). Therefore, the interviewees' sampling criteria and the operationalization of this research have been conducted very carefully and mindfully.

Another critical criterion essential to conducting a high-quality qualitative study lies within the dimension of ethics (Moisander & Valtonen, 2006). In order to make research ethical, many practices have been implied. This research topic is not uncomfortable, sensitive, or intimate in regard to interviewees' personal data, behavior, or beliefs. During the interviews, the researcher made sure no uncomfortable questions were asked. Also, the researcher made sure that all information provided by the interviewee are confidential. Therefore, if the interviewee wanted to stop the interview for any reason or preferred not to answer an inevitable question, the researcher obeyed. Moreover, all participants were asked to sign the form of consent in which they could state to prefer to remain anonymous. The interests of the research and the data collection were transparently communicated, so the participant had insight during the data collection.

In conclusion, all essential elements and requirements to guarantee the research's credibility are taken into account and performed (Moisander & Valtonen, 2006). A clear perspective on used and highlighted theories and theoretical concepts has been defined and reflected regarding transparency.

4. Results

The presentation of this study's results will follow the three sub-questions presented in the introduction section of this dissertation. The first two themes are corresponding with the first sub-question. First, the theme of *'social interactions'* will be highlighted, and how *Pokemon go* players interact both verbally and non-verbally with other players. The second theme is '*disparities in social interaction'*. Within this theme, a division in players' experience between online and offline communication is presented. The second sub-question investigates players' interpretations of social relationships. This question is covered by the overarching theme of *'valuation of social relationships*. Hence, different interpretations, valuations, and definitions of social relationships based on player experiences are presented. The third sub-question wonders the impact of the game's pervasiveness on the player's social relations, which is covered by the theme *'game nature and sociability'*. Here we see how the game nature is experienced as stimulation for physical and social activities, and how it has led to the community building. The exhaustive analysis of the data used to create these themes are retrieved in developed coding trees (Appendix A).

4.1. Players' perception of social interaction

Social interactions are connections *Pokemon Go* players have and experience with other players. Social interaction variates from a gesture or greeting to passing players to a conversation with someone. Thus, for social interactions, there is not always the need to use words to communicate. Therefore, this theme is divided into two sub-themes. The first sub-theme entails **perception of non-verbal communication** which differs from body language to group formation of players and comes with positive and negative perceptions and player experiences. Contradictory to non-verbal communication, there is **perception of verbal communication** which is the second sub-theme. Verbal communication entails conversations players have with each other while playing. This is a different form of communicating and, therefore, also differently perceived, valued, and experienced. The proximity of other players and their additional communication is experienced differently among the interviewees. Therefore, it is divided over the two above stated sub-themes. The theme of social interaction focusses on quick contact between players and how individual players experience these fast interactions.

Perception Non-verbal communication

With the first sub-theme of non-verbal communication, the emphasis is on how *Pokemon Go* players experience other players' presence without the necessity to talk. Based on player experiences, an explanation will be provided of the meaning-making process of players' social interaction. *Pokemon Go* players experience practices of sociality over gaming massively. However, there is not always a need to talk. The feeling of *togetherness* is often experienced by players while just enjoying the game when in the approximate presence of other players. A pattern is found among multiple players that the game is better enjoyed when playing together. However, it is not only the verbal connectedness that brings players together. It is the feeling of *shared interests* and enjoyment that connect individual players to others. In one of the interviews, the feeling was described as: *"when I enter the Pokemon Go community, I just realised, we are all the same. We are all just a bunch of nerds"* (Interview 6, forty-year-old female player). Another interviewee explained the beauty of being together: *"It is so beautiful to see and be part of a group that exist out of so many different people who all share the same interests"* (Interview 7, thirty-five-year-old female player). Positive experiences of non-verbal communication, as presented above, are shared by five of the twelve interviewees who have participated in this study. Thus, players describe their feeling of being part of something and appreciate the approximate and existence of other players around them without the necessity of talking. This seems aligned with studies on sociality by Amirou (1989) and Simmel (1997a, 1997b), who state that sociality is the function of a community, and a motivation for individuals to become a part of it. This also seems to be aligned with the study of Yang and Liu (2017), who stated that though augmented reality and spatial connectedness players experience a feeling of community.

However, not every player perceives the formation of the community as positive. Quite a different experience is the feeling of *awkwardness* and *unpleasantness* that has been mentioned by six of the twelve interviewees. Non-verbal communication is often perceived by single players when approaching a group of other players. The body language of other *Pokemon Go* players is quite distinctive which makes it easy to identify other players: *"You can identify a player by the way they interact with other people, when I go for a run I can always tell who is playing, simply by the way they behave and swipe their finger over they mobile phone"* (Interview 5, Daniel, thirty-year-old male player). This is also one of the reasons why some single players feel intimidated when approaching a group of *Pokemon Go* players. Non-verbal communication and body language practiced by groups of players are often perceived as uncomfortable by single players. One interviewee explained that: *"when I*

used to live in Apeldoorn it happened that I saw groups of people hanging around a statue in the city park, that happens to be a PokeStop or gym. But it always made feel really awkward, so I rather walked around them and kept my distance than trying to join them or interact with them" (Interview 2, twenty-two-year-old male player). This is negatively perceived experience has been recognized or shared by three other interviewees. When this participant was asked if he had specific reasons for the *feeling of awkwardness* he explained to me that he was intimidated by the numbers of players: *"I think it was because they were playing as a group, whereas I was enjoying the game as a single player"* (Interview 2, twenty-two-year-old male player). Hence, the sociability enjoyed by players could be a burden or a barrier for other player's sociability. Thus, even though *Pokemon Go* (Niantic, 2016) brings people together and can enlarge one's sociability, it could negatively impact single players' sociability. The entry barrier for single players to a group is often perceived as rather high and uncomfortable by three of the twelve interviewees. In other words, non-verbal communication is perceived positively as negatively according to player's experiences with social interactions. This seems to be a new contribution to previous studies by Eklund (2015), who stated that gamers engage in sociability practices over gaming. However, findings differ slightly from Eklund (2015), since ones increased sociability could lead to a burden of another's sociability.

Perception of verbal communication

Likewise, to non-verbal communication, verbal communication is also a form of social interaction *Pokemon Go* players practice. Similarly, verbal communication is perceived and experienced positively as negatively by the twelve interviewees of this study. Positive perception of verbal communication can be explained from a somewhat functional perspective. The majority, ten out of twelve interviewees, explained that verbal communication with other players is sometimes needed to progress in the game since they need other players to complete specific game elements successfully. Therefore, communication is rather enjoyed for its functionality: *"Sometimes I start a conversation, to gather people because I want something. I need them for a raid battle, so I need them at a specific time and place. So, for that I will do some smalltalk"* (Interview 8, thirty-four-year-old female player). Ten out of twelve players admit that it is almost crucial to play with others if they want to enjoy the game: *"Nowadays I would almost say it is essential to pay together if you want to fully enjoy it. There are more and more features you need to play or be together for"* (Interview 12, Jeroen, thirty-year-old male player) Also players explained

that the game nature often stimulates players to connect in order to succeed specific tasks: *"Sometimes there are quests, in order to succeed you need to talk with someone to add them to the game. So, in that sense the conversation is purely game related and functional"* (Interview 11, Daniel, thirty-two-year-old male player). Thus, sociability is enjoyed but not for its core purpose but for a rather practical requirement. This is aligned with previous studies by Coan et al., (2013), Valente et al. (2015), and Hamari et al. (2018), who state that the nature of pervasive gaming encourages players to interact with other players physically. The functionality of verbal communication experienced by players has aligned with theory as well, according to Coan et al., (2013). They stated that communication commonly exists out of small talk between players or strategic discussions on how to play to the game successfully. All in all, verbal communication is often experienced positive since it enlarges the player's game enjoyment. This is stimulated by the gameplay of *Pokemon Go* (Niantic, 2016) since it is required for gamers to interact if they want to enjoy the game to its max capacity.

Nevertheless, there is also a group of players that prefer interaction for a social cause rather than a functional cause. Five out of twelve interviewees explained that social interaction with other players did not feel like an obligation but was practiced for the sociability of it: *"No, for me it is just fun, I have two accounts to play with, so I do not need other players to do raids or to trade with. I can help myself with all of that. To me, there is no practical aspect in meeting and talking to other payers, it is just very fun"* (Interview 6, forty-year-old female player). Thus, it is clear that players experience social interaction as *fun*. However, in order to understand it, a clarification of the term *fun* is required. Thus, to understand why they prefer social interactions with players, interviewees were asked why and what they appreciated. *"It is nice that through the game, you meet people you would have never met, nor did expect to meet because you were surprised, they were playing as well. For example, there is this group of elderly women in my neighbourhood, I have become quite familiar with through the game" (*Interview 9, Roel, thirty-five-year-old male player). Another interviewee explained that it is the opportunity to meet new friends that make it valuable: *"It is more fun when you go outside together and get to know people you can play with* (Interview 2, twenty-two-year-old male player). So, in short, it is meeting and interacting with new people, bringing people together, and the opportunity and the possibility to make new friends is what makes social interaction enjoyable and valuable to payers. This is aligned to a previous study that coined that sociability in games beholds a game design

concerned with planning, stimulating, and developing social policies and supporting social interaction (Hew et al., 2004; Eklund 2012; 2015; Blinka, 2015).

Unfortunately, not every *Pokemon Go* player agrees on the sociability of the game. Two significant patterns arose when analyzing the interviews. The first reason to dislike social interaction with other players is because of the stereotypical player the game attracts. Five participating players do not feel the need to talk to other players because *"they are not my people"* as articulated by one of the interviewees: *"I enjoy playing the game on my own, simply because the average player, is just not my type of person"* (Interview 8, thirty-four-year-old female player). When asking participants to describe the average stereotypical Pokemon Go player, the five participants unanimously characterized them as *fanatic nerds*. This intense stigmatization is, therefore, for some players, reason enough to distance themselves from social interactions.

Moreover, other players do not distance themselves based on the player stigma but simply because they do not feel the need to make new friends. They just enjoy the game for themselves and do not see the benefits of interacting with other players. This seems to contradict previous studies that stated that gaming enhances the sociability of players (Hew et al., 2004; Eklund, 2012, 2015; Blinka, 2015). In the case of *Pokemon Go* player, gaming does not necessarily improve sociability. This, however, is aligned with the study of Szentgyorgyi et al. (2008), who stated that pervasive games encourage but not promise player's sociability

Besides the differences in intervewees' experiences, all twelve interviewees agreed on the statement of *Pokemon Go* (Niantic, 2016) being an icebreaker for face-to-face sociability: *"I think, Pokemon Go has a bonding factor, and it can be really seen as a conversation starter or a so called icebreaker"* (interview 2, twenty-two-year-old male player). This is aligned to a previous study (Yang & Liu, 2017), which states that *Pokemon Go* (Niantic, 2016) is understood as an easy topic to talk about to other players or strangers and an excellent way to start the conversation. The interviewees believe this because it is a shared interest to talk about, and therefore it is an approachable topic for chitchat and conversations that are rather short and flat. Therefore, *Pokemon Go* (Niantic, 2016) is also believed to be helpful for players who have difficulties in socializing. The game lowers the barriers to initiate a conversation with other players since it is a common and logical side effect of the game. *"I think it simplifies social contact for someone like that, since it easier to talk to another person when you have that one thing in common" (*Interview 3, Barth, twenty-two-year-old male player).

So, indeed the game brings people together for the ones that enjoy being together with other players, and for the players who prefer a more individual approach, there is no need to interact with other players. However, for a better understanding of how social interaction is practiced, a more detailed analysis is sufficient. Therefore, in the next theme, a distinction between online and offline social interaction will be highlighted and how players practice and experience each form differently.

4.2. Disparities in social interaction

Pokemon Go (Niantic, 2016) has no in-game communication tool available to its players. Fo players to get in touch with each other, they need to either physically approach each other face-to-face (Offline) or find any form of social interaction online. Therefore, it requires the player's effort to experience sociability through the game. This results in a distinction between online and offline social interactions, with very different results in how people behave online versus offline. As mentioned earlier, offline contact is either enjoyed or avoided by players. This part of the analysis focusses on differences in online and offline social interactions, type of conversations, player's experiences, and differences in the valuation of offline and online interaction. Therefore, the sub-themes are **offline interaction** and **online interaction** to portray a clear distinction. According to the research analysis, it is presented that besides the differences in medium, players use online and offline interaction with different motivations and purposes. Hence, another reason to separate the themes, to formulate a more precise and in-depth answer to the general research question of this study.

Offline interaction

Generally, offline social interactions occur when the game is played together. Therefore, one of the sample criteria for players was to have enjoyed the game with others outside. However, this does not mean that people actually play together and walk around town together. This phenomenon happens to only appear on special occasions or when players have fostered a specific relationship. Playing together generates social interaction; the most occurring form of playing together is a '*raid battle'*. A '*raid battle'* in *Pokemon Go* (Niantic, 2016) is when a powerful rare Pokemon appeared in the game, and random players have to team up to defeat and catch the Pokemon collaboratively. For this sophisticated teamwork, the interaction between players is necessary to succeed. Thus, the *functionality* of verbal communication among players. Commonly to find players and to arrange a team to

start a *'raid'*, interaction is sought online. By using Whatsapp or Telegram, payers arrange to team up and meet offline to start a *'raid battle'*: *"I checked my apps to see if people were raiding somewhere nearby"* (Interview 9, Roel, thirty-five male player), *"I used to seek online for people to join me for a raid battle, and then we went there"* (Interview 9, Roel, thirty-five male player). In order to have an offline conversation, it often starts online when concerning the *'raid battle'*. This seems contradictory to the study of Shen & Williams (2010), who states that individuals often displace offline for online social relations.

When players unite for a *'raid battle'*, offline social interaction is experienced very contradictory by players, from small talking for social purposes, to '*break the awkward silence'*, to some *Pokemon Go* (Niantic, 2016) related chitchatting, to extensive in-depth conversations. Hence, different players experience different forms of offline interactions. This is due to different motivation for attending a raid, for example, three interviewees explained that: *"I always think a raid is rather awkward, this is purely because most of the time you attend a raid with random people you do not know, and also do not really want to talk to since I am only there to catch the Pokemon"* (Interview 4, twenty-two-year-old male player). However, not everyone joins just to catch the Pokemon: *"I like everything that comes with teamwork and social groups, this is also why I do raids, because it happens in groups"* (Interview 6, forty-year-old female player). The second motivation was shared by four of the participants. *'Raid battles'* are attended by players with different motivations, which results in different experiences in social interaction. The players who raid for game purposes only, do not appreciate social interaction on the spot and experience the minimal talking as uncomfortable or as an obligation to break the silence. Where others join because of the social aspect of playing together, so, they can talk and meet up with other players: *"When we are at the raids, we just stand there and start chatting with each other. At some point it's not even about the game anymore, but it is just about being together outside enjoying each other's company"* (Interview 12, Jeroen, thirty-year-old male player). Once more, the sociability motivation is shared by a total of four interviewees. Altogether these findings are aligned with gaming's production of new relations (Jansz, & Martens, 2005). However, it is very depending on the gameplay motivations of the players.

Another situation in which offline interaction among players appears is when *Pokemon Go* players randomly meet outside. Unfortunately, this is not an event that happens very often, and when it does, all players seem to agree that it is short, modest, practical or concluding a game-related conversation. Nine of the twelve interviewees explained that it is mostly asking about the game session and giving some game-related tips and tricks*: "Most of*

*the times it was positive, we once saw another fanatic player on his bike who told us to go to the water to catch a specific Pokemon" (*Interview 10, fifty-four-year-old male player).

Online interaction

Online interaction offers a plurality of social interactions. As earlier mentioned, *Pokemon Go* (Niantic, 2016) does not have an in-game feature. This means that players of the game need to seek ways of communication themselves: *"You have to be creative to get in touch with other players, cause in my neighbourhood for example, there is just nothing there"* (Interview 7, thirty-five-year-old female player). All twelve interviews admitted to having searched for online contact with other players for various reasons. Thus, if players indeed feel the need to communicate with other players, they understand the necessity of seeking for other players online. Therefore, when it comes to online communication, it is not as straightforward or natural as offline communication, because unlike offline communication, there is no random nor unintended possibility of involvement. Seven interviewees agreed to have experienced or understand the difficulties in involving in online social interaction: *"finding groups online is hard, however once you you have found them it is easy to get in. It is very rare for online groups to have a selection procedure for who can get in and who cannot. I have never experienced it"* (Interview 9, Roel, thirty-five-year-old male player). This seems to contradict previous studies (Blinka et al., 2015, 2016). Hence, sociability can be dependent on its environment, especially for *Pokemon Go* (Niantic, 2016). This means that *Pokemon Go* related communication does differ between an online or offline sphere. Players need to actively seek other players online, which can be experienced as quite challenging. So, in order for players to have online social interactions with other players, they need to find online chat groups. These groups mostly exist on Telegram and Whatsapp, which are also the platform through which the community is most active and experienced by players.

Since the entrance barrier to online social interaction is experienced quite high due to limited information on access, interviewees were asked how to approach and how to get into online interactions. Two tactics were discussed and relevant for all players who are involved in online social interactionism. Once more, social interactionism is not a requirement for gameplay, it is a possible preference of players. The first tactic is searching online: *"so I used google to search for online Facebook communities, then I applied to become a member, and once I got in I got the online code to enter a whatsapp group"* (Interview 10, fifty-four-year-old male player). The first tactic is often used by individual players and is acknowledged by three interviewees. The second tactic started from an offline approach, where players asked

or were asked by other players if they wanted to join the Whatsapp or Telegram group, more than half of the participants have experienced this: *"I asked the other if they wanted to do another 'raid'. Then they told me like, hey there is also 'raid' chat group, do you want to join?"* (Interview 6, forty-year-old female player). This contradictory approach is practiced by players with a conflicting interest than the individual players. These are the players who enjoy the game, preferably with others, this counted a total of four interviews. The second approach of players seeking online social interaction seems to contribute to the study of Vella et al. (2017). Who stated that pervasive gaming could enhance the player's offline sociability. Also, online sociability can benefit from pervasive gaming.

Moving on, we are now focussing on the construction of online interaction. This section presents an analysis of the differences in online interactions between private or group conversations and the differences between media platforms. Due to the group formation in which online contact appears, the majority (eight out of twelve) of the players label the content of the conversations as impersonal, practical, short, and lacking in-depth. All conversations are primarily game related and are perceived as direct and straightforward. When the participants were asked to sketch insight in a regular online conversation, the overall answers were similar: *"uhm, they are quite game related to be honest. So it is a very short talk, most of the time it is just a game related question or a request"* (Interview 12, Jeroen, thirty-year-old male player). However, exceptional online conversations are not excluded. It happens that online conversations drift from practical short ended talks to more in-depth and personal conversations. However, these forms of interaction were relocated to another group chat or held in private chats. Nevertheless, the group chats who have a more personal charisma tend to terminate faster and do not last that long according to player experiences. *"It is a group chat for non-related Pokemon Go chatting, however, they died pretty fast since the majority of us is just there to play they game"* (Interview 9, Roel, thirty-five-year-old male player).

However, the groups that maintained on a more personal level, were the groups that were created for friends, who are besides co-players also friends. Friends like to discuss more than just a game that they have in common. Six interviewees claimed to have similar group chats as well. Furthermore, even more, one participant claimed to have a *Pokemon Go* originated friendship Whatsapp group that goes beyond discussing insight game details: "*We made a whatsapp group named 'we go out for lunch after a community day matter what the rest does, we do our own thing"* (Interview 6, thirty-four-year-old female player). This is the perfect example of how online *Pokemon Go* interaction can grow beyond game purposes

when there is a more personal relationship between players. This seems to contribute to Yang and Liu's (2017) study, who claimed that *Pokemon Go* (Niantic, 2016) is often played to maintain or initiate friendships.

There is not only a difference in private and group chats. There is also a difference in the platform on which the group chat is formed. It all started on Whatsapp, where groups of people came together to talk about the game. However, soon WhatsApp became too small since the maximum number of people allowed to one group chat was too small. Due to technicalities, players decided to switch their groups to the platform Telegram: *"It all started on WhatsApp, but we grew too big for the app, we expanded the 250 people limit. Thats when we switched to Telegram and created specific Pokemon Go raid groups"* (Interview 11, Daniel, thirty-two-year-old male player). At this stage, a distinction in usage of each platform was created. Telegram groups are known for their effectiveness, informative, and useful characteristics. *Pokemon Go* (Niantic, 2016) is the main topic of every conversation, and mostly the interaction is efficient and game related. Therefore, Telegram is experienced as a rigorous game-related online atmosphere. This is aligned with Coan et al. (2013), who stated that online gaming communication mostly focusses on practicalities and game-related topics. Although WhatsApp got abandoned for a second, later, the platform made reintroduction for different purposes: *"Whatsapp slowly died, very little is shared in the WhatsApp groups, the main focus is on Telegram now"* (Interview 9, Roel, thirty-five-year-old male player). However, three players still use Whatsapp with their friendships fostered through the game. Whatsapp has a much more personal and emotional level and is experienced much more social than practical. Four players in total stated similar quotes as: *"We still have small whatsapp group of like six friends, and we still do hang out a lot together"* (interview 12, Jeroen, thirty-year-old player).

Not only content of a group chat is adjusted to the platform, but also players adjust to platforms. When defining the online interactions and how different players experience online interaction with other players, it is interesting to focus on the role *Pokemon Go* players fulfill within the online interaction. On the one hand, five out of twelve players do not participate in online interaction since it feels slightly too intense and adds no benefits to their game experience: *".I am just not that fanatic, so I prefer not to take part in any of the online groups,"* (Interview 2, twenty-two-year-old male player). On the other hand, four players claimed to have a rather passive online persona that they are on the receiving end of the conversations and only talk when they have to for personal gains. *"I appreciate the groups, but I am myself more of a reader than a poster so to say"* (interview 9, Roel, thirty-five-year-

old male player), another player said, *"I prefer to wait and see, over participating actively online"* (interview 1, Jelle twenty-five-year-old male player). They also tend to believe that the players who are very active online are the '*hardcore fanatic players'*. This is justified since dedicated players tend to admit being very active online when asked if they were prominent the online group chats. Contradictory to previous studies that show that gamers play often displace time from offline social interactions to online interactions, which could weaken offline social relations for gamers (Kneer et al., 2014; Shen & Williams, 2010). Pokemon Go players do not displace offline for online contact since occasionally, the game requires players to interact with each other offline. Moreover, as drawn from the analysis, the majority of the interviewees prefer offline over online interaction.

So, in short, to provide an answer to the sub-question: *" How do Pokemon Go players interpret sociality and sociability through online and offline social interactions?"* Online social relations are perceived as more practical and game-related and only go further into a personal level when there is a friendship or relationship between players. Where offline relations differ between uncomfortable obligated interactions for game purposes to chitchatting about a verity of subjects, this is based on player motivations and purposes. Therefore these findings are entirely opposing the results stated by Blinka et al. (2016; 2015), who states that sociability is independent of its environment and players will find a way to communicate one way or another since both online as offline sociability are very similar and therefore easy to substitute by each other. Overall, we can state that it is quite player-dependent on how they experience and interact in online and offline social relations.

Nevertheless, patterns occur in specific types of interactions among multiple players, as described above. Although a considerable amount of social interactions was experienced and described as short, *Pokemon Go* related, and superficial. Nevertheless, some players had experienced more in-depth and personal connections. Also, some studies claim that gamers often prioritize online relations over offline relations (Shen & Williams, 2010), However in *Pokemon Go* (Niantic, 2016), it is not the case, it is somewhat experienced contradictory by the interviewees. When discussing valuation, overall preference was lent to offline interaction. This is also related to the player's opinion on offline interaction and its necessity for friendships constructions. This is aligned with a theory that states that increased online communication do not have to result in increased connections or enhanced relationships with that person offline (Pollet et al., 2011). However, a more precise and in-depth analysis of friendships will be presented in the next theme, which provides a deeper level and understanding of social relationships.

4.3. Valuation of social relationships

Social relationships are the possible end-products of long-lasting and appreciated social interactions and are defined as a long-lasting bond between players. However, a social relationship is not a fixed construction; it has multiple interpretations and is experienced differently among players. Unlike the first theme, the focus is not on how players communicate with each other, but what types of relationships players have with each other and how they are experienced, fostered, and valued. The theme valuation of social relationships is aligned with the second sub-question central in this research and is divided over two separate sub-themes. The first sub-theme is **old and new relationships**, which distinguishes existing relationships and newly fostered relationships of *Pokemon Go* players. Already existing relationships contain family members, colleagues, and friends are were already fostered previously to the game. Newly fostered relationships include all relationships fostered through *Pokemon Go* (Niantic, 2016). The second sub-theme is **relationship interpretation**, and this sub-theme focusses on newly fostered social relationships only. Within these social relationships, three patterns occurred that were later used as categorization for three different forms of newly fostered relationships. This sub-theme also focusses on how each different form of these relationships are experienced and valued by the interviewees

Old and new relationships

Already existing relationships consist out of friendships, family members, and colleagues, players already had a relationship with previous to the game. The questions asked were rather straightforward, by asking the interviewees how *Pokemon Go* (Niantic, 2016) has had an impact on their already existing relationships, quite positive impacts appeared to have been experienced. Seven players admit to feeling the relationships have strengthened since there is another activity to do with their companions: *"obviously your bond grows stronger when you have and share something together"* (interview 1, Jelle twenty-five-year-old male player). This is aligned with Simmel's theory of the communal meal (1997a, 1997b). Eating together is an activity in which often each other's company is enjoyed, and social interaction takes place. People share their thoughts and experiences of the day over a shared dinner; this shared enjoyment of leisure time is the definition of sociability. However, this statement was more suitable for family members and colleagues since the impacts on existing friendships were experienced differently. *Pokemon Go* players did not believe that the game has brought them more together or connected with each other since the relationship was already there and

stable before the game entered. It was more seen as a pleasant activity they could play or do together: *"I do not think it had an impact on my friendships, it was more just another game we could play together"* (Interview 5, Daniel, thirty-year-old male player). To be more precise, playing *Pokemon Go* (Niantic, 2016) with old friends, so to say, was more understood as side-activities to do when meeting with friends, according to six interviewees. For example, they can play *Pokemon Go* (Niantic, 2016) as an activity while going out for drinks or a walk. This seems like an excellent addition to Durkin and Barber (2002), who stated that gamin could strengthen existing relationships. This study shows that it is especially the case for colleagues and family members.

To resume the family-related social relationships. One example of a player who had a long distant relationship with his sister, who lives in Australia, believes that the game has brought more depth into their relationship. *Pokemon Go* (Niantic, 2016) is the reason they have frequent contact with each other and based on the higher frequency it is more comfortable to touch upon more personal topics:" *I have my sister as a friend in the game, and this helps us to stay in touch more"* (Interview 2, twenty-two-year-old male player), "*For me and my sister, we have more interaction because of the game. Therefore it is also easier for us to touch upon more serious topics, and I actually ask how she is really doing"* (interview 2, twenty-two-year-old male player). Previous to the game, he experienced to find it hard to ask about personal things in his sister's life because they had not spoken for a while. Now with *Pokemon Go* (Niantic, 2016), they give each other updates and send gifts to each other daily, which lowers the barriers for getting personal: *"I think because we talk to each other more, we automatically have grown closer. Simply because we know more about what happens in each other's lives"* (interview 2, twenty-two-year-old male player). This is aligned to a theory that states that gaming can occasionally produce new or strengthen existing bonds within a family (Durkin & Barber, 2002) and). Another player agreed on the strengthening effects of *Pokemon Go* (Niantic, 2016) on personal relationships. The interviewee who used to play with his wife and children together as a family and believed it brought them more together as a family since they shared something and did something with the four of them: *"I really enjoyed it to be be with each other in a whole different level, we were now connected by a game element" (interview 10, fifty-four-year-old male player).* He also believed it is because they shared practice everyone is equally interested in, which connected them on a more collective level: *"The impact of the game was that we had a shared goal, which made us play together. I really enjoyed that"* (Interview 10, *fifty-four-year-old male player*). Another aspect of why he thinks his family enjoyed it is because his

kids could talk about something, they were better knowledged at than their parents. Especially his son was very educated in Pokemon and knew all the details, as a child to feel more in charge encouraged him to continue: *"another bonding moment was when in 2016 he my son twelve. As kid it is nice for once to able to explain something to your parents. He knew all the names of every Pokemon. He knew all the stories, so that was beautiful to see"* (Interview 10*, fifty-four-year-old male player*). Furthermore, as a parent, he enjoyed the family bonding time and the pleasure the game brought to his family, mainly because he was brought closer to his son. These findings do justify that gaming can lead to the production of new relations, for example, within families, especially between fathers and sons, which is an excellent contribution to a previous study of Jansz and Martens (2005).

Another exciting group that frequently appeared in the results was the existing professional bond with colleagues from work who experienced an impact of *Pokemon Go* (Niantic, 2016). Multiple interviewees explained to have experienced a deeper connection with their colleagues who play the game as well, or to be more precise a non-professional connection with their work colleagues: "*And with my colleagues who play as well, I really like to play with them and to talk about it"* (Interview 8, thirty-four-year-old female player). Three participants explained that through *Pokemon Go* (Niantic, 2016) an opportunity appeared to talk about non-work related things and to get to know each other drifted form a business and professional level:" *In a friendship it does not matter, but with colleagues it gives you the opportunity to talk about something else when you at work"* (Interview 1, Jelle, twenty-five-year-old male player). They explained that they had experienced growth and extension on their relationships to their Pokemon Go-playing colleagues: *"Well I do have some colleagues who play as well, and because of that we have become friends. We started off just playing together and now we even attend community days together"* (Interview 9, Roel, thirty-five-year-old player). Two other players explained that with the colleagues they do not know very well, Pokemon Go could function as an easy conversation starter to get to know each other a bit better: *"it also helps to start the conversation, it helps you talk about something else with certain colleagues"* (Interview 8, thirty-four-year-old female player). Here we see once more how *Pokemon Go* (Niantic, 2016) can be interpreted and used as an icebreaker (Yang, & Liu,2017).

Besides already existing relationships *Pokemon Go* (Niantic, 2016) also enables the opportunity to foster new relationships through the game. Players believe that the game is perfect for igniting new relationships because it is partially in the games nature to meet other people outside. It is stated as partial because only half of the participants agreed on the

necessity to meet new people: *"No, that is not for me, I do not play for the sociality"* (interview 10, *fifty-four-year-old male player*). However, the players who did play because they enjoy the presence of other people stated that *Pokemon Go* (Niantic, 2016) is great for getting to know new people. Since it just happens that they get in contact with other players both online and offline, and also because it is stimulated by the game to interact: *"Via other players you get to know new people, and also if you go to different raids at the same spot, you constantly see familiar faces you get to know after a few times"* (interview 7, thirty-five-year-old female player). *Pokemon Go* (Niantic, 2016) is a very suitable game to interact with other players because, as described earlier, it is perceived and experienced as the ideal icebreaker to open up a conversation. Moreover, the game functions as an icebreaker despite the type of relationship. It is equally experienced in old as in new relationships. This seems to be a helpful contribution to the theory of Yang and Liu (2017).

When diving deeper into fostering a social relationship, players agreed that it is very similar to how *non-Pokemon Go* relationships occur; this is the second type of social relationship. According to interviewees, they get to know someone better by the quantity of time to spend together. One player explained that, once he met someone at a raid battle, and after doing a few raids together they felt familiar and started to talk about *non-Pokemon* related topics: *"It has happened to me that we were doing a raid together, and when the raid ended, we stayed there and talked for hours about all kinds of stuff"* (*(Interview 11, Jeroen, thirty-two-year-old male player*). Four other players agreed on this process where the beginning of the relationship starts by meeting someone outside offline, and then slowly the relationships develop: *"I feel like the majority of your social interactions with someone is offline and then online"* (Interview 11, Daniel, thirty-two-year-old male player). Only one player had a different experience where he was brought into contact with someone online by a mutual acquaintance, to work on an app. They talked for months together purely online, and when they finally met in person, the friendship started to blossom. Although for him the experience was from online to offline, he also believed it happen more the other way around: *"For the first four months we only spoke on Telegram to work on the app design, till I just randomly bumped into him outside"* (Interview 12, Jeroen, thirty-year-old male player). These findings contradict the study of Ramirez and Zhang (2007), who stated that the relationship between individuals could be stressed when transferring. However, these findings are aligned with Schaap's (2002) study, which stated that gamers often initiate relationships in online environments.

Also, when discussing whom players manifest a relationship with is very diverse. All twelve agreed that Pokemon has a very open sphere and vanishes all social boundaries and barriers*: "It is very easy to access, you will fit in easily and can join other players just as easily"* (Interview 8, thirty-four-year-old female player). It does not matter who you are since it does not determine whom you can get close to: *"It does not matter if you are older or younger, you can all socialise with each other"* (Interview 10, fifty-four-year-old male player). With *Pokemon Go* (Niantic, 2016), it is quite common that relationships bloom between people that outside the game never would have developed: *"He is 13 years younger than me, it is a strong match but game wise it fits like a glove"* (Interview 6, forty-year-old female player). This is one of the beauties of the game that it can bring together anyone open for meeting new people.

Pokemon Go (Niantic, 2016) is a great platform to strengthen existing relations and manifest new relationships. The characteristic of the game is that it brings all different kinds of people together, and therefore someone's race, age, gender, or game experience does not matter. Nevertheless, the term relationship is still rather vague and broad. Therefore, in the next sub-theme, a more concrete definition to term relationships will be provided.

Interpretations of social relationships

To build upon the previous sub-theme, three specific categorizations appeared when analyzing newly fostered relationships through *Pokemon Go* (Niantic, 2016). The first one is the least personal one and is understood and labeled as the '*functional relationship*'. In this construction a relationship is maintained for practical game purposes, three participants explained: *"So we just made plans together to do raids or other game related stuff, but cannot really say that I gained any personal contacts through the game"* (Interview 10, fifty-four-year-old male player). Players have a bond with a specific player to help each other, ask questions, trade Pokemon with or battle raids with. This is the lowest form of social relationships and is purely appreciated for its functionality. It is also a relationship that is very low in its maintenance and very bounded to game-specific related topics only:*" It is just functional, the interactions you have with other people, it is not social"* (Interview 11, Jeroen, thirty-two-year-old male player). This is aligned with Coan et al. (2013), who stated that gaming communication tends to have an efficient and game-specific characteristic.

The second one is the *'Pokemon Go friend'*, this type of relationship goes more in-depth, and players enjoy each other's company. Frequently hang out together to play the game and have both online and offline interactions with each other. Even though the majority

of the interactions are still *Pokemon Go* based, they do no hide away their personal lives: *"when I think about it in totally, I think 80% is game related and 20% is personal"* (interview 7, thirty-five-year-old female player). The shared activities of *'Pokemon Go friend'* are mainly playing *Pokemon Go* (Niantic, 2016) together and talking about the game, it happens that leisure activities are shared, but they were never the intention to meet: *"It happens once or twice that we went out for a drink afterwards, but we never hung out outside the game, it always starts with Pokemon"* (Interview 7, thirty-five-year-old female player). Although they are not perceived as '*real*' friends, they are not underappreciated. These types of relationships are highly valued because they enlarge the enjoyment of the gameplay. Six players experienced the game to become alive when enjoyed with others: *"But the people I got to know through the game made it more enjoyable"* (Interview 12, Jeroen, thirty-year-old player). However, even though they enjoy the relationships, three participants do believe that the relationship will end once one of the two decides to quit playing: *"I am not sure but I think they will just disappear because we will get out of touch when one decides to stop playing"* (Interview 6, forty-year-old female player).

The last category of relationships is the '*friendship*' players have with others. Only four participants have developed friendships with whom they value as equal to their outside-the-game friendships: *"from my Pokemon Go friends only the ones I'm really close with I consider as my real friends"* (interview 7, thirty-five-year-old female player). It is a strong bond wherein *Pokemon Go* (Niantic, 2016), in the beginning, played the fundamental base but shifted slowly more to the background. To enjoy their friendships as both insides as outside, the game and share lots of *non-Pokemon Go* related activities. Here we know how friendships can originate from a shared game but can develop into a friendship disconnected from the game. It is stated that friendships happen faster when one plays a lot or devote more time to the game. This is because they also see them more often, which strengthens the bond. Therefore, people with interest in socializing have a higher chance of starting a friendship with other players because they invest more in getting to know other players: *"It is all personality-related, with some people you have a click and with others you do not. When you* figured there is a click you invest *more and start having more personal and deeper conversations"* (Interview 7, thirty-five-year-old female player). That players who intensively play have a higher chance of finding friendship through the game than other players. Hence they play the most. The interviews support this since the ones who have fostered friendships are the ones that play the most.

Since there are different forms of social relationships, it was interesting to figure out what determines a social relationship to develop into a friendship or not. The answer was rather simple; it is very personality sensitive. *Pokemon Go-originated-friendships* do not differ from any other friendship but depending on the click between two people. To answer the second sub-question: *How do Pokemon Go players interpret social relationships developed by playing the game?* It depends on if it is a new relationship or not. If the relationship is an already existing one, such as a family member or a colleague, it can have a positive effect since it is another shared activity or interest one can practice. Even more, it can also go more in-depth and tighten the bond between two people. For the newly fostered relationships, it depends on how devoted the person is to commit to the relationship. This is why the categories of relationships have appeared as patterns in the analysis. Nevertheless, it is stated that the more devoted the player is to play the game, the more time is spent on playing, the higher the chances of fostering new friendships through the game. This is an excellent contribution to a study on individuals who spend more time on social network sites/social media have a more extensive social network (Pollet et al., 2011).

4.4. Game nature and sociability

Previously we discussed all experienced forms of sociability through paying *Pokemon Go* (Niantic, 2016). From the fundamental form of social interaction to a deeply rooted friendship. This fourth theme will follow the guidance of the third sub-question and will explain how players make use of the nature of the game the pervasiveness to engage in social relations. Firstly, the focus will be on how players experience the game nature in terms of social interaction with other players. With the first theme of **pervasiveness and player sociability**, game characteristics and player behavior will be analyzed concerning social interactionism. Secondly, and finally, the most potent form of sociability in the realm of *Pokemon Go* (Niantic, 2016) will be analyzed. The community and its social ties will be explained and analyzed. The sub-theme **community building** will explore the deep roots of the community's social interaction and how it manifests in an offline sphere. Besides community building as a result of pervasive gaming will be discussed.

Pervasiveness and player sociability

Since the beginning of the game in 2016, *Pokemon Go* (Niantic, 2016) has stimulated players to go outside and physically move around to enjoy the game best. Generally, players acknowledge this feature is one of the main motivations for playing in the first place: *"Later*

on it was the extra drive to go outside" (Interview 8, thirty-four-year-old female player), *"The game challenges you to get in contact with other players and to go outside"* (Interview 11, Jeroen, thirty-two-year-old male player). This is a helpful contribution to a study on augmented reality games such as *Pokemon Go* (Niantic, 2016) and its power to potentially influence the physical activities of possible players, by adapting the sedentary nature of gameplay towards a somewhat more physical nature (Lago et al., 2019).

However, *Pokemon Go* (Niantic, 2016) has changed a lot over the years in its gameplay. More and more features appeared, which did not require any physical activity. Also, the amount of the so-called '*Pokestops'*, which are geo-located stops where players can collect gifts and items or gyms where they can battle other trainers have increased: *"There is a gym right around the corner I can access from my bed"* (interview 2, twenty-two-year-old male player). This together with an improved extended reach in geo-location, players could often enjoy specific features such as gym fights or Pokestops from their homes, due to this improved accessibility: *"When me and my friends play from home, it is much more relaxed"* (Interview 4, twenty-two-year-old male player). These findings somewhat contradict the previous study by Kasapakis & Gavalas (2017), who stated that pervasive games make players move through the physical. Although, this contradiction applied for four players in total, who enjoyed the game for a more casual purpose, which entails a non-serious nor fanatic drive, and lack of specific or intricate goals to succeed in gameplay. Players who occasionally play the game just to pass the time were more affected by the improvements of the game. They resulted in playing more at home and started to lose the drive to go outside to enjoy the game. These are also the players who have the least interest in meeting or interacting with other players. Therefore, their will to participate in the game physically has been declining. This is aligned with a study that coins that by designing and using networked devices, so co-located players can play a location-based augmented reality game that does not guarantee an increase in social interaction among players (Szentgyorgyi et al., 2008).

Even though playing form home is tempting for everyone, a specific group of players dependents too much on the sociability brought by the game to stay at home. Therefore, six players praise the game nature for encouraging them to go outside and socialize with others. One interviewee said that he was more motivated to take longer walks with this dog: *"You need to walk to get things done within the game, so that really helped me getting motivated to take my dog for a longer walk around the park"* (Interview 2, twenty-two-year-old male player), where another player explained her motivation was driven by the brought sociability: *"I just simply enjoy seeing everyone too much. I like the community I am part of*

so much, that I would not dare to stop playing" (Interview 6, forty-year-old female player). With similar statements, six interviewees explain that because of *Pokemon Go* (Niantic, 2016), they went outside more, gamed less indoors, and improved their social circles with new social relations fostered through the game. This is aligned with a previous study stating that players experience the encouragement of pervasive games to go outside to play since the games facilitate opportunities to socialize with others, as described by Hamari et al. (2018).

These players have a specific goal in the game, which requires a lot of movement and dedication. For example, to collect all Pokemon, they need to hunt them, which requires much ground to discover and explore. Without bridging distances, it is impossible to collect every Pokemon. Others want to become the best trainer; therefore they need to train and fight a lot and conquer many Gyms, therefore as well players need to bridge the distance to go to every gym. Others only pay for the raids to participate raids; they need to go to the assigned location to battle: *"This is purely because the game requires me to be with other players. For some raids you need 8 to 10 man to start"* (interview 8, thirty-four-year-old female player). Thus, pervasive elements of the game get people moving but also brings people together. Especially for a raid, or a (gym) fight, players need to be close to each other in order to do so. Players agreed that Pokemon Go forces them to be physically close to each other: *"Pokemon Go does not allow players to have a far distance between them. You have to be physically nearby if you wanna trade or raid"* (Interview 9, Roel, thirty-five-year-old male player).

On the other hand, the pervasiveness is also enjoyed by a large number of serious players not based on an intrinsic game element, but rather on an extrinsic element. The *togetherness* and *social connectedness* the game encourages players to seek and experience is crucial for some. Players admit continuing playing because they enjoy the company of the other players too much and would miss it too much to give it up. One participant said: *"It is the extra push I needed to go outside, and because of that I get to meet new people, and started to recognise other players while being outside"* (Interview 7, thirty-five-year-old female player). Thus, it is not the game itself, but the physical movement required by the game that brings people together is what stimulates people to play. This contradicts the theory of Kasapakis & Gavalas (2017) since it is not the game itself that motivates people to go outside, but it is instead the gameplay that stimulates people.

Two characteristics of the game that enhances or strengthens the pervasiveness of the game are the missing in-game communication feature and game created necessity for players to play together. Therefore, both communication and gameplay is both socially and physically dependent: *"You have a reason to go outside and do something social"* (interview

7, thirty-five-year-old female player). This is aligned with previous studies that stated that players are encouraged to go to specific places with many other people to play the game, this fosters the opportunity for players to interact with each other and engage within social relations (Vella et al., 2017). First, the missing communication function makes sure the game blocks all possible communication between players inside the game. No online in-game social interaction is possible: *"It is not possible to make contact with other players inside the game, there is no chatroom"* (Interview 2, twenty-two-year-old male player). Therefore, if players want to communicate with each other, they need to meet in person. This has been supported by several scholars who claim that the main focus of pervasive games concerning social interaction is on promoting direct interaction between players (Coan et al., 2013; Magerkurth et al., 2005).

Although there are many online ways to communicate with other players via various social network platforms, players still prefer to meet in person to communicate. This is linked to the dependency players have on one another. In order to successfully and ultimately enjoy the game, players need to play and work together. To enable teamwork, players need to be in approximate close distance of each other so their geo-location connects: *"and when everyone is there we can directly start the raid"* (Interview 9, Roel, thirty-five-year-old male player). Nine players have experienced the pervasive game as stimulation to be together and to go out together. However, this does not mean that players who enjoy others company offline do not have any interest in communicating online. This is an excellent contribution to previous research (Shen & Williams, 2010), even though the pervasive game aspects stimulate physical, social interaction, it does not mean everyone evenly appreciates it.

For the players who value offline interactions brought by pervasiveness, often comes a significant interest in online communication. Since these are the players that have generated friendships and friendships, continue online as well. Nevertheless, these players admit to preferring offline interaction since this gives a more detailed and better understanding of the other player: *"online text can be misinterpreted or be misunderstood. Offline communication is therefore much easier and more convenient"* (Interview 3, Barth, twenty-two-year-old male player). Therefore, offline interaction is more valued since it generates better funding to build on a relationship. A connection feels more real and alive when practiced offline. Contrary to a study, players are replacing offline social relations such as friends for online and virtual substitutes (Shen & Williams, 2010).

Besides a positive perspective on the pervasiveness, it can also be seen as a burden. Some players do not feel the need to go out with other players or connect with others. They

prefer to either play solo or participate in minimal online interaction for game-related purposes, or self-benefits. One of the interviewees said: *"I have friends who are in chat groups and play with others, but that is just not for me. Personally, I do not feel the need to"* (Interview 4, twenty-two-year-old male player). Someone else said: *"With Pokemon Go I do not feel the need to socialise. I mean with my friends yes, but that is different, we socialise anyways. But for the game otherwise I prefer not to. The only reason for me is when I want to do a raid. Because then you kind of have to, it is necessary if you want to participate"* (Interview 5, Daniel, thirty-year-old male player). Thus, theory by Mulloni et al. (2008) is confirmed where they claim that augmented reality and pervasive games do not guarantee increased social interaction among and between players, however it does stimulate social interaction by providing an inviting atmosphere. Hence, *Pokemon Go* (Niantic, 2016) allows social interaction rather than guaranteeing it.

Thus, the pervasive game nature of *Pokemon Go* (Niantic, 2016) indeed is experienced as an encouragement by players to go outside and interact with other players. However, it has not been the game itself, but rather the gameplay the stimulated players to physically and socially invest in the game. Therefore, pervasive games do not guarantee enhancement of player's sociability, but it generates an inviting atmosphere that stimulates players to invest, through the promotion of direct social interactionism.

Community building

Before we analyze the community and its physical offline aspect, we need to acknowledge that the online side is just as prominent. As earlier mentioned, *Pokemon Go* players seek many forms of online communication. However, as explained, this online communication is always happening in group formation. Group formation is, therefore, seen as the online *Pokemon Go* community. The community is separated into many subsections and spread over the Netherlands. With geo-located communities, every area with *Pokemon Go* players is therefore supported and represented by a community. A community exists out of a variety of people that are all bonded by a shared interest. All twelve participants shared a collective experience in which the community and the game were understood as inclusive: *"The game has something to offer to everyone, it is interesting for everyone since it is super diverse. Therefore the community contains a large diversity in members as well, which I personally like a lot"* (Interview 6, forty-year-old female player). Community members participate in for different reasons and motivations. However, the two main reasons to join the community is stated as the feeling of *belonging* and *family* and the access to

practical information and game benefits. This is aligned with the study on sociality by Croce (1945) and Berger and Luckmann (1966). They stated that sociality is the feeling of being part of a community or society. The second type of player is not part of the community since they think the community is too intense and only for a specific type of player who is too driven and too fanatic: *"I would never participate, cause it is way too much in your face if you ask me"* (Interview 2, twenty-two-year-old male player). Four out of twelve interviewees agreed to be unwilling to participate. Nevertheless, they appreciate the existence of a community because they appreciate the joy it brings other players.

When we look at the online community, a plural set of experiences is shared by interviewees. Some say it is rather intense and too much and seen as a necessary good to get all the game benefits and to be updated on game insight information. The community is experienced and *impersonal* and *hectic*, this because participation is very minimal by these players. A third of the interviewees shared similar options and experiences, one interviewee gave an example where she felt *invisible*: *"The community members are very tight with each other, I tried joining them a few times but I was not interesting for them so I noticed they did not really want to give any attention to me"* (interview 8, thirty-four-year-old female player). These are opinions from players that do not play for social purposes. They want to accomplish as much as possible within the game and, therefore, only socialize with others when needed. Four out of twelve other players have a very different mindset and, therefore, also opposing attitudes and experiences with the community. A feeling of *connectedness* and *belonging* is often mentioned. The community by active participating members is described as very open, enjoyable, warm, and divers. Hence, quite the opposite opinions, this has all to do with the level of participation one practices into the community. The perfect example of a heartwarming experience was by one of the female players: *"We are standing outside in quite a large group and one girl came to me with her arms wide open and she said 'come here, I am so glad that you are here, because you are welcome'. I mean that is beautiful is it not?"* (Interview 6, forty-year-old female player). This is aligned with the study of Kneer et al. (2018), who stated that gamers experience the feeling of '*social relatedness*'. Moreover, these are the same participants that make the most friends. We might be able to state, the more one plays, the more likely they are participating in a community, the more they appreciate the community, the more likely they make friends since it is stated that the community originates most of the friendships made by the interviewees.

On the other hand, the offline community is stimulated by the pervasiveness of the game. Since people are brought together through the game in an offline sphere, the

community has a robust offline character as well. People enjoy their time together outside, and experience the community feeling collaboratively: "*We just end up talking with each other, so the game becomes irrelevant and it is just about being together."* (interview 12, Jeroen, thirty-year-old male player). This is a joint statement the majority of the community members share. The pervasiveness of the game has resulted in in-game requirements and specific game-related events, which brought people together. Through augmented reality and the spatial connectedness with other players, research showed that *Pokemon Go* (Ninantic, 2016) confirmed a feeling of community due to social connection users having experiences with other players and an increased degree of physical activities. This is a contribution to Yang and Liu's (2017) theory since it is only applicable for actively participating, community members.

The most significant events are the international Pokemon Go fest. The smaller versions of these events are *Pokemon Go* community days held in the Netherlands. Both forms of events are organized to get people outside of their homes, get players moving, and bring them together. The catch is similar; an event upholds the special occasion wherein rare, or special Pokemon appear for trainers to catch on a specific location. In order for trainers to succeed, they need to travel to the event location to participate. These moments are seen as once in lifetime opportunities by players, so, therefore, events attract a large number of people.

Notwithstanding, the pervasiveness of the game and its events brings people together; it does not mean it always increases the player's sociability. For the international *Pokemon Go fest*, social interaction with other players is minimal. The decrease of sociability is experienced according to a set of valid reasons. It is an international event, so there is a language barrier between players, there is a tight schedule at an event to catch all the particular Pokemon. Therefore, there is minimal time for socializing. The two players who went to an international event admit to feeling less of social cohesion because of these language barriers: *"You do not know which language they speek, I mean the event was in Germany and my German is very basic. So you rather just not talk to other because you do not know which language they speak"* (Interview 12, Jeroen thirty-year-old male player), *"It is because everyone is from different countries, so it is because of the people why you have very limited social interaction with others"* (Interview 11, Daniel, thirty-two-year-old male player). The event is enormous, and there are thousands of players. Therefore, an event is experienced as impersonal because it is too molar to connect with others. Nevertheless, players admit to experiencing an international fest as a bonding experience with their friends

with whom they attend the event since it is seen as an outing with particular goals, which they would only do with actual friends.

The community days, on the other hand, are very similar in construction to the events. However, it is much smaller and meant for a specific community. It is experienced as a very social get together with loads of community members. The different positive experience were shared by the majority of the players who have attended one or more community days: *"A community is something else, it is for peep you already knew from the community so therefore you interact a lot more"* (Interview 11, Daniel, thirty-two year old male player) , *"My active days are over, but I make an acceptation for the community days, then I go out to play cause it is too fun to play with everyone"* (Interview 12, Jeroen, thirty year old male player), *"The majority of people who play are super open and welcoming, especially at a community day. If you go around town in Nijmegen during a community day, you see plenty of raids and everyone is s happy"* (interview 4, twenty-two-year-old male player). Active community members (four out of twelve) experience it as a very social and welcoming event that is more focussed on the social aspect than on the Pokemon that there are to catch. They also experience it to be very welcoming to new community members. New members are introduced to other members, and everyone is very coherent and collective. The leader of the Leidschedam community explained: *"we are very open to new members, if they need help, we do not hesitate to help them. However not every community is like ours"* (Interview 12, Jeroen, thirty-year-old male player), even though this is a rather biased experience, the experience get supported by other players from other communities:" *Everyone is more than welcome to join us"* (Interview 6, forty-year-old female player). Hence, active members see the community as the summit of social interactions initiated by the pervasive characteristic of *Pokemon Go* (Niantic, 2016). This is aligned with studies that claim that pervasive games provide opportunities for sociability (Sublette, Mullan, 2010; Hamari et al., 2018).

However, not everyone sees the community days like that. The players who are less active in the community, often see the community days as an opportunity to catch special Pokemon or to accomplish any other unique feature. Once they have met saturation in their gameplay, they will leave the event and not stay for social purposes. One interviewee described the practical aspect of a community as followed: *"I am not there to socialise, I am there to catch the Pokemon. I only leave when I have caught what I had come for, or when my fingers are too cold and I cannot play anymore"* (Interview 8, thirty-four-year-old female player). This is a mindset shared by a total of four practical players. Four other players do not attend at all. They stigmatize the events as too extreme, and as events that are for the

hardcore players. The four claimed, *"it is too much of a hustle"* (interview 4, twenty-two-year-old male player) to travel to an event. They do not identify with that profile and therefore feel uninvited or obligated to attend. Once more, it appeared that no generalizable experienced patterns are found.

To answer the sub-question: "*How do Pokemon Go players make use of the pervasive characteristics of the game to engage in social interactions"*. Massively on different aspects by a selective group of players. The game itself is based on players' physical activity and teamwork. With multiple game aspects, sociability is encouraged and stimulated. Nevertheless, with improved technological features, an escape from the unwanted social investment has been created for and used by some players. Although, the players who have an interest in social bonding all agreed that offline interaction is the best way for a bonding experience. This is also the reason why the game has succeeded in bringing people together. The existence of an offline game community is purely an end product of the pervasiveness of the game. Through the *Pokemon Go* community, offline and offline, loads of social interactions among players have ignited. This is aligned with previous studies which showed that a community serves different purposes and are used and valued differently by its members (Orleans, and Laney, 2000; Jansz, & Martens, 2005; Griffiths et al., 2004; Schaap, 2002; Pollet et al., 2011).

Moreover, with the game-related and game organized events, once more, the sociability brought by pervasive gaming is experienced. However, not everyone seems to share the same experiences. It requires a specific set of devotion to the game and community to read the social benefits.

5. Conclusion

With the following section, this research will be concluded. This conclusion shortly presents an overview of the overall results and purpose of this particular study. Section 5.1 presents the main findings with a general answer to the research question of this study. Section 5.2 gives an overview of the theoretical implications, where section 5.3 displays the social implications. Section 5.4 explains the limitations of the thesis. Finally, section 5.5 presents an overview of suggestions for future research to build upon this study.

5.1. Main Findings

Pokemon Go (Niantic, 2016) is an online, pervasive game that brings players together in an offline environment. Through augmented reality, online game artifacts and elements are combined and placed in real-live environments for players to enjoy. With the pervasive characteristics of *Pokemon* Go (Niantic, 2016), players were enthused and encouraged to go outside their dorms to enjoy the game. Through this renewing and innovative nature of online gaming, a new form of social interaction among gamers arose. Thus, gamers were no longer playing together online and communicating online. Moreover, with *Pokemon Go* (Niantic, 2016), players were still gaming online but in an offline environment with other players, which resulted in offline outside game social interactions. This phenomenon led to the main research question of this study: *How do Pokemon Go players in the Netherlands experience social relations online and offline by playing the game?* This research suggests four main domains of analysis: social interactions, disparities in social interactions, valuation of social relationships, and game nature and sociability. Together with three sub-questions who covenant to the domains are, an insightful answer to the overarching research question is provided.

So, to provide an answer to the research question, an overview of the results of the four domains will be presented. Social interaction is practiced verbally and non-verbally. Overall verbal interactions have a variety of player's experiences. However, the minority experiences verbal interactions as unwanted or awkward. Nevertheless, the majority sees these interactions as necessary to enjoy the gameplay, a form of connectedness, or a possible ice breaker to increase sociability. Non-verbal communication, on the other hand, is perceived as uncomfortable by players who had no interest in socializing with other players. Especially non-verbal communication by groups is perceived as intimidating by single players. Luckily for the majority, non-verbal communication is experienced as a sense of

acknowledgment and belonging. This, because one sees other people similar to them, enjoying and sharing the same interests.

Moving forward, disparities in social interactions break down the differences in online and offline social interactions. Generally, offline interaction is preferred over online interaction. Offline interaction is often necessary to accomplish in-game goals, but it also makes the game more tangible and livelier, according to players. Nevertheless, online interaction is appreciated based on its functionality. Thus, often online interaction is used with a practical perspective. Only players who have established friendships engaged in online interaction for social purposes.

Valuation of social relationships explains the different experienced impacts *Pokemon Go* (Niantic, 2016) had on new and old relationships. Old relationships benefit on different levels from the game. Family ties are strengthened, colleagues become closer, and friends share another activity. Moreover, *Pokemon Go* (Niantic, 2016) is also experienced as a great platform to foster new friendships. This, due to the offline brought sociability, and the shared interest among players. When diving deeper into the newly fostered friendships, three main categories occurred. Functional friendships are valued for practical benefits only. *Pokemon Go* friends are friendships that only exist during gameplay. Lastly, actual friendships are fostered over gameplay. The longevity of these friendships continues outside of the game, as well as during gameplay.

Lastly, game nature and sociability show that the pervasiveness of the game encourages people to move outside their houses and interact with other players. Generally, this is experienced as 'the beauty of the game'. Moreover, pervasiveness has resulted in the construction of the *Pokemon Go* community. However, only a selected number of players participate within this community and have positive perceptions of it. These are also the players who spend the most time playing. Other players perceive the community as rather too intense and overrated.

In total, twelve individuals were interviewed, which resulted in a variety of experiences and answers. Therefore, it is hard to generate one generalizable constructed answer to the research question, which applies to every player. Moreover, *Pokemon Go* (Niantic, 2016) is generally a single-player game. Therefore, the game is often enjoyed individually. Therefore, a qualitative approach to in-depth interviews was beneficial for this type of study. In-depth interviews enabled an understanding of how players experience social interactions and relationships based on their preferences and behaviors. This form of research on understanding why and how interviewees experienced social interactions became evident,

which was crucial to answering the research question of this study. Besides the operationalization of the sections: social relations and gaming, community, online vs. offline relations, online relations, and offline relations helped to investigate the relevant concepts during the in-depth interviews.

5.2. Theoretical Implications

Looking back at the review of the processed literature of this study. This research findings substantiate the value and statements of specific highlighted theoretical discussions. However, it also brings some different perspectives to some other theories. First theories on pervasive gaming and sociability are used for this study. As earlier mentioned, pervasive games created hybrid places have become social environments for many users of the games (Vella et al., 2017). Players are encouraged to go outside to play since the game facilitates socializing with friends, bonding with family members, and making new connections with strangers and other players (Hamari et al., 2018). As seen in the analysis, this is indeed experienced by players of *Pokemon Go* (Niantic, 2016). However, by improved technological innovations, players' necessity to go outside has been declining since players had more and more gaming options to enjoy from indoors. Although other players who prioritize sociability are the primary motivation for gameplay, they are less impacted by improved technological innovations. Hence, they justify that by playing pervasive games together, the interaction and relationship become more tangible between players. Therefore, the relationships are often perceived as more present, as stated by Magerkurth, et al (2005). When it comes to motivations for pervasive gaming of *Pokemon Go* (Niantic, 2016) scholars, show that players generally acknowledge different motives for playing the game (Wang et al., 2018; Yang et al., 2017), with the most relevant motives of friendship maintenance and relationship initiation and achievement (Yang, & Liu, 2017). However, generally, the most prominent motivation of players was to go outside and to be physically active. Only four players in this particular study confirmed the theory by Wang et al., (2018) and Yang et al., (2017).

In terms of the social context of gaming, in literature, there is an ongoing discussion on the perception of gaming on one's social relationships (e.g., Shen & Williams, 2010; Utz et al., 2012; Kowert et al., 2014, 2015; Kneer et al., 2014, 2018). Both positive and negative impacts have been discussed and linked to this specific research. Study shows that gamers often displace time from offline social interactions to online interactions, with the possible disrupt of offline social relations for gamers (Shen & Williams, 2010). Some studies show that gameplay could lead to weak social ties and a lack of offline friendships (Kneer et al.,

2014). Hence, gamers exchange valuable information concerning social and emotional issues with less intimate online relations instead of their offline friends (Domahidi et al., 2016). Contradictory, other studies have shown and explored the positive effects of gaming on social relations (Jansz & Martens, 2005; Cole & Griffiths, 2007; Domahidi et al., 2016; Hamari et al., 2018; Kneer et al., 2018), and that gaming is not always enjoyed individually but instead experienced as a social gathering (Ferguson & Olson, 2013; Kneer et al., 2018). With this study and used data set, there is no reason for labeling gaming to impact gamers' social relationships negatively. Based on interviewees' experiences, the majority presented an enrichment of their social circles, especially concerning their offline social ties. For the gamers who have not participated in any social interactions brought by the game, there have been no signs presented of a replacement of offline social ties for online social ties neither. Hence, in-game online social interaction is not supported nor facilitated through *Pokemon Go* (Niantic, 2016), there is no embodied designed sociability implemented in the game design (Hew et al., 2004; Eklund, 2012).

5.3. Social Implications

As presented in this study, there is no need for linking gamers to concepts of social isolation, destructive addiction, and stereotypes. This in-depth, explanatory, and reflective study makes several noteworthy contributions to current literature in game studies and gamer experiences. Moreover, the empirical insight provides a new perspective on the construction of pervasive and augmented reality games related to gamer's sociability. This study has connected and revealed new insights into sociability and pervasive gaming and the importance of understanding player experiences. By understanding the differences in experienced sociability through gameplay, future steps can be taken into enhancing awareness for the social benefits players can gain from gaming. With this research, it is shown that there is no necessity in perceiving gaming as a burden to an individual's sociability. Players have experienced *Pokemon Go* (Niantic, 2016) as an enhancement of their social relationships. Besides, the social relevance of this study enhances the understanding of the liveliness of *Pokemon Go* (Niantic, 2016) since, as justified by the analysis, still loads of players are participating and enjoying the game. As presented, sociability is experienced as enhanced and joyful by the majority of players. Therefore, future steps can be taken into providing more pervasive games such as *Pokemon Go* (Niantic, 2016), so gamers are given a more diverse opportunity to increase offline social ties through gameplay.

5.4. Limitations

The most significant limitation of this study lies within the allocation of resources for this research. The twelve interviewees' scope was somewhat limited and, therefore, only covered a tiny population of the totality of Dutch *Pokemon Go* players. However, different types of players and players from multiple communities were included to enhance the representation of the broader population. Also, the crisis brought by Covid-19 has resulted in additional limitations for this particular study. Initially, a mixed method of both interviews and observations was meant to be conducted. Observations would have brought a more objective understanding of how groups of players practice sociability. Also, interviews were restricted to be held online. Therefore, no attention could have been given to body language and gestures practiced by interviewees who could have resulted in a more in-depth understanding. Nevertheless, by conducting semi-structured interviews, participants were encouraged to speak openly and highlight what was important to them personally. Therefore, a fruitful data set and revealing results have been provided despite this study's limitations.

5.5. Suggestion for future research

For future research, an interesting element to include in research on player sociability through *Pokemon Go* (Niantic, 2016) is player observation. Through observation, a better characterization of sociability in practice can be observed and explained. This would be useful to make the study more generalizable and also more tangible. Moreover, throughout the interviews, different elements are highlighted, which are interesting for future research. For example, within the game, there are three different themes in which players can participate. The teams: Valor, Mystic, and Instinct are related to three magical and rare Pokemon and symbolize personality traits and identities. For further research, it would be interesting to see if the players experience differences in social relationships with team members compared to members of opposing teams. Is their rivalry, or does the division in teams have no impact on sociability at all? This would help create more detailed insights into the value of social relationships and the different interpretations of relationships. Finally, an interesting element is player profiling, while analyzing the data, around three patterns occurred which explained differences in players. However, not enough insightful elements could be drawn from the data. Future research should focus more specifically on different player profiles. This would help to understand and create insight into a particular behavior, experiences, preferences, and motivations of players. By bringing understanding of the

variety of types of gamers, and their differences in sociability, the stigma on the concept 'gamer' will slowly change and vanish.

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Appendix A

The coding trees below present the main themes, the sub-themes, axial codes and a collection of open codes retrieved from the thematic analysis practiced and executed for this study.

Theme 1: Social interaction

Theme	Sub theme	Axial code	Open code
Social interaction	Non-verbal communication	Positive connotations	Feeling of togetherness Collective Being together identification
		2. Negative connotations	Awkwardness Unpleasantness Distinctive body language intimidating Grouping
	2. Verbal communication	1. Positive interpretations	functionality Necessity Game nature stimulation Sociability Helpful Fun icebreaker
		2. Negative interpretations	Stereotypical player Rejection Stigmatisation No interest

Theme 2: Disparities in social interaction

Theme	Sub theme	Axial code	Open code
Disparities in social interaction	Offline interactions	Game related interaction	Raid battle Teamwork Online roots anti-social
		2. Socialising purposes	Chitchatting Social enjoyment Being together Interested Helpful

Theme	Sub theme	Axial code	Open code
	2. Online interactions	1. practical	Game related Shallow Short Dependent
		2. Player investment	Missing chatroom Online search Offline roots Hard to find
		3. Player experience	Open environment Divers inviting obscure Hidden Friendships Awkward Intens Rejection

Theme 3: Valuation social relationships

Theme	Sub theme	Axial code	Open code
Valuation social relationships	Old and new social relations	Already existing relationships	Shared activity Neutral effect on friends Enforcing professional relations with colleagues Stronger family ties
		2. Fostered relationships	Shared interest Getting to know each other Good friendship starter Online and offline possibilities
	2. Interpretation social relationships	1. Functional	Purely game bonded No social interest

Theme	Sub theme	Axial code	Open code
		2. Pokemon go	Functional interest Social interest lacking personal depth Game dependent Improving game enjoyment
		3. Friendship	Devotion Outside the game Intensive game play Declining relevance Pokemon go

Theme 4: Game nature and sociability

Theme	Sub theme	Axial code	Open code
Game nature and sociability	1. Pervasiveness and player sociability	Physical movement	Motivation to go out Game development Distance dependent Game requirements
		2. Social aspects	Get in contact with other Social enjoyment Forced social interaction
		3. Communication	No chat room Online noise Additional online interaction Need for online interaction
	2. Community building	1. Online	intens Chat groups Impersonal
		2. Offline	Open Divers Inclusive Fanatic connectedness Better together

Theme	Sub theme	Axial code	Open code
		3. Events	Practical Anti social Die hards Investment Social barriers Game driven
		4. Community days	friendly welcoming Spread Socially inviting Lively

Appendix B

Below an overview of the used interview guide according to which all semi-structured interviews are held and executed.

Introduction:

How old are you?

Where are you from?

Are you living in the Netherlands permanently?

For how long have you been here?

What is your opinion on Pokemon Go in general?

Why?

What is your opinion on the game play of the game?

Why?

How many times a week do you play Pokemon Go?

How much time does each session consume?

Can you tell me something about your first experience with Pokemon Go?

How old were you?

Where were you when you first heard about the game?

How did you get informed about the game?

Where did you first play the game?

Did you play alone, or with friends?

Why?

Why did you decide to start playing the game?

Why did you continued playing after the first time?

What is your favourite aspect of the game?

Why?

Could you describe how regular game session of playing Pokemon Go looks like to you?

Could you explain if there are any, differences in experience when playing the game alone or with others.

Why

Social relation and gaming

How do you experience social interaction with other players while playing?

Do you remember a specific moment in which you specially enjoyed playing the game with others?

How often do you join other people to play together?

Do you have an established group of friends?

Did you already have a group of friends you ended up playing Pokemon Go with?

What is your favourite moment in playing Pokemon Go together with other players?

Why?

When you play with others, what do you do together?

Are all activities you do with others while playing Pokemon Go related?

What happens when you stop playing/

Is everyone going home?

Are you hanging out?

Does the relationship continue beside or beyond Pokemon Go

Can you give examples of other activities?

How do you feel about playing with others?

How do you experience engagement in social relations by playing Pokemon Go?

Where did you find/meet other players?

Was it easy to find them?

What is your best experience in meeting other players?

Why?

How would you describe the social relations you have fostered by playing Pokemon Go?

How do you feel about these relations?

Do you see friends made through Pokemon Go as real friends?

Are the equal to your other friendships?

Is there anything you want to say about your experiences with social interactions through Pokemon Go?

Community

Are you aware of the online Pokemon Go community?

Are you aware of the Dutch online Pokemon Go community?

How would you describe the Dutch community?

Are you part of the community?

Why did you decide to join the community?

Do you have friends in the community?

Which type of relationships do you have with them?

How would you describe your relationship to other community members?

Do you do something together besides playing the game?

(think of similar questions)

What is your opinion on this community?

How do you get in contact with community members?

How do you maintain this relationship?

Through what do you communicate?

How do you get in contact with non community members?

How do you maintain this relationship?

Through what do you communicate?

Are you engaging in any of the Facebook groups

Why?

Are you engaging in any of the WhatsApp groups?

Why?

Are there any other platforms through which the community is active

If so, could you explain them to me?

Is the community more online or offline focussed ?

Could you explain why you think that ?

Do you have examples?

Online VS Offline relationships

Do you prefer playing with other players physically or online

Why?

Do you prefer online or offline relations with fellow players?

Why?

Has Pokemon Go an impact on your already existing friendships?

Elaborate?

Have you made new friends through the game?

Are these friendships online or offline?

Do you introduce these new offline friends to your already existing friends?

How do you get in contact with other players?

Do you have more online or offline Pokemon Go relationships?

Why is that?

Do you have both online and offline relationships with the same person?

Did you meet them online or offline?

How did this transition happen?

Through what did you meet?

Has the relationship grown further than Pokemon Go?

Online relations

What are your experiences with online interaction with other players?

How do you engage in these relationships?

How do you value the online relationships fostered through Pokemon go?

How do you feel about your online relations

On what form of communication are the online relationships based?

Why is that?

Is communication with your online acquaintances Pokemon Go based?

What other communication is popular (if applicable)?

Do you value your online relationships as friendships

Why is that ?

How do you maintain online relationships ?

Are there any problems you encounter in online relationships ?

Why it that?

Would you like to become offline friends with the people you have met online?

How can this be arranged?

Have you done this before?

How was it, how did it go?

Offline relations

What are your experiences with offline interaction with other players?

How do you engage in them?

How do you value the offline relationships fostered through Pokemon go?

How do you feel about your offline relations

With how many friends do you play?

How do you play offline?

What do you do?

The people you play with, how did you meet them?

Did you know them in advance?

Did you establish new offline relationships?

how do these relationships look like?

Are you aware of the Pokemon Go events?

How did you discover them?

Have your ever attended one?

What did you think of it?

How did you experience it?

Which were your motivations to attend?

Why?

Did you see other players you already knew or met before?

Did you plan meeting other players at the event?

How did you plan this?

Were your expectations met?

Why?

What do you do at an event?

Did you join alone or with friends?

With who did you go to the event?

Did you meet someone who became your friend?

How did the relationship start?

Is there anything you want to say about your experiences with online and offline relations through Pokemon Go?

Is there anything you would like to share generally?

Thank you for your time and consideration, and for participating in my interviews.
Your input is very much appreciated

Probes used during the interview:

1. Ask interviewee to elaborate on specific given answers
2. Repetition to verify comprehension and to stimulate details
3. Remain silent to give interviewee time to elaborate, or to indicate that more information is expected to be given by the interviewee
4. Ask for more detailed argumentation on given answer
5. Ask follow-up or sub-questions in response to given answers
6. Specify elements that were not clear or uncertain, and ask for interviewees specific thoughts on those issues

Appendix C

An overview of all participants of this study with corresponding information concerning the interviews.

Number	Name	Age	Gender	Medium	Time
1	Jelle	25	Male	Online phone call	00:50:23
2	anonymous	22	Male	Online phone call	00:50:18
3	Barth	22	Male	Online phone call	00:50:42
4	Anonymus	22	Male	Online phone call	00:49:24
5	Daniel	30	Male	Online phone call	00:51:50
6	Anonymus	40	Female	Online phone call	00:54:05
7	Anonymus	35	Female	Online phone call	00:50:11
8	anonymous	34	Female	Online phone call	00:45:10
9	Roel	35	Male	Online phone call	00:48:22
10	anonymous	54	Male	Online phone call	00:47:13
11	Daniel	32	Male	Online phone call	01:02:01
12	Jeroen	30	Male	Online phone call	01:00:03