

DASEIN ONLINE!
A STUDY OF THE EXPERIENCE OF FLOW
IN THE VIRTUAL PLAYGROUND.

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ABSTRACT

The purpose of this study was twofold. First, it aimed to present and understand the experiences of online gamers from the paradigm of positive psychology. To achieve this, the phenomenon of flow was investigated to see whether or not, it is experienced whilst gaming online and if present, how it is revealed in this context. The second purpose was to contribute to theory building and to respond to extant research recommendations. Aligned with a qualitative orientation, the method selected to achieve the objectives of the study was interpretative phenomenological analysis. A sample of four participants who met the criteria for inclusion in the research were selected and interviewed using semi-structured interviews. Data was analysed and interpreted inductively and categorised into superordinate themes. These were presented as two sections: Section A explored the experience and meaning of online gaming through the following three superordinate themes; intention, pre-gaming rituals and gaming process. Section B discussed the social experience and meaning of gaming online through the superordinate theme, a gamers way. This study both challenged and supported theory and research in the field and introduced novel areas, such as pre-gaming rituals and the subthemes; marijuana and gaming space. This is a notable and promising „side effect“ of a research design that is exploratory. Findings called for future multi-disciplinary research into flow, gaming and online relationships considering Csikszentmihalyi’s concept of autotelic relationships and Heidegger’s philosophical framework.

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Marjory Josephine de Witt

Ivan Joseph Koopowitz

TABLE OF CONTENTS

Title page	
Declaration	
Abstract	i
Acknowledgements	ii
Table of contents	iii
CHAPTER ONE: INTRODUCTION	
Introduction to the study	1
CHAPTER TWO: GAMING ONLINE: A LITERATURE REVIEW	
2.1. Introduction	3
2.2. Technology and the pursuit of the good life	4
2.2.1. Technology and meaning	6
2.3. A new world and space: The Internet and the World Wide Web	8
2.3.1. Looking in: Virtual reality and cyberspace	9
2.3.2. The screen as mirror: Identity in cyberspace	10
2.3.3. Lacan's theory of the mirror stage	12
2.4. Imagination and identity construction	13
2.5. The online virtual playground	13
2.5.1. Why and what to play: Genres of games online	14
2.5.2. How to play: The process of gaming online	17
2.5.3. Who is playing who? Relationships and gaming	19
2.5.4. Gamer motivation	21
2.6. Making it real: Presence and the mediated environment	22
2.6.1. Presence and Damasio's levels of self	24
2.6.2. The experience of presence	25
2.7. Chapter summary	26

CHAPTER THREE: FINDING FLOW: A LITERATURE REVIEW

3.1. Introduction	27
3.2. The good life. Optimal experiences and Csikszentmihalyi's theory of flow	28
3.2.1. Flow characteristics	29
3.2.2. Models of flow	30
3.3. Life themes and quality of life	32
3.3.1. Friends, family and community: Autotelic relationships	34
3.4. Research, optimal experiences and the web	36
3.4.1. Measuring flow	37
3.5. Chapter summary	43

CHAPTER FOUR: METHODOLOGY

4.1. Introduction	44
4.2. Research aims	44
4.3. Ideological orientation: Qualitative research	44
4.3.1. Interpretative phenomenological analysis (IPA) applied to research in the virtual playground	47
4.3.2. Phenomenology: Husserl and the roots of phenomenology	49
4.3.3. Heidegger branches out: Hermeneutic phenomenology	51
4.3.4. Gadamer and the fruits of hermeneutic phenomenology	54
4.3.5. Symbolic interactionism	55
4.3.6. Social constructionism, discursive, cognitive psychology and narrative: Similarities and differences with IPA	57
4.4. Interpretative phenomenological analysis: The method	58
4.4.1. Sampling: Who is included and why	59
4.4.2. Data collection and IPA: Semi-structured interviewing	61
4.4.3. Data analysis and levels of interpretation for doing IPA	64
4.4.4. Looking for and finding themes	65
4.4.5. Making the connections between themes	66
4.4.6. Connections and patterns between recurrent themes	68
4.5. Ethical approaches in the research	68
4.6. 'Validity' and 'reliability' in the research	69

CHAPTER FIVE: DATA RESULTS AND ANALYSIS

5.1. Introduction	72
5.2. Overview of participants narratives	
5.2.1. G. Postgraduate university student	72
5.2.2. T. In-between jobs	73
5.2.3. M. Postgraduate student	74
5.2.4. F. Undergraduate student	74
5.3. Results	75
5.4. Data Analysis	75
5.5. Section A. The experience and meaning of gaming online	76
5.5.1. Intention	77
5.5.1.1. Fun, relaxation and escapism	77
5.5.1.2. Mastery and challenge	79
5.5.2. Pre-gaming rituals	82
5.5.2.1. Marijuana	82
5.5.2.2. Gaming space	83
5.5.3. The gaming process	84
5.5.3.1. Time	84
5.5.3.2. Cognitive processes	85
5.5.3.3. Embodiment	86
5.6. Section A. Summary	90
5.7. Section B. The social experience and meaning of gaming online	91
5.7.1. A gamers way	92
5.7.1.1. Relationships in and out the game	92
5.7.1.2. Online multiple identities	95
5.7.1.3. Online codes of conduct	97
5.8. Section B. Summary	101

CHAPTER SIX: DISCUSSION

6.1. Introduction	103
6.2. Section A. The experience and meaning of gaming online	103
6.2.1. Intention	103
6.2.1.1. Fun, relaxation and escapism	104

6.2.1.2. Mastery and challenge	105
6.2.2. Pre-gaming rituals	106
6.2.2.1. Marijuana	106
6.2.2.2. Gaming space	108
6.2.3. The gaming process	110
6.2.3.1. Time	110
6.2.3.2. Cognitive processes	112
6.2.3.3. Embodiment	113
6.3. Section B. The social experience and meaning of gaming online	116
6.3.1. A gamers way	118
6.3.1.1. Relationships in and out the game	119
6.3.1.2. Online multiple identities	121
6.3.1.3. Online codes of conduct	122
 CHAPTER SEVEN: CONCLUSION	
7.1. Introduction	128
7.2. Overview of the study	128
7.3. Summary of the findings	129
7.4. Implications of the study and recommendations for future research	132
7.5. Limitations of the study	134
7.6. Reflexivity	134
 REFERENCE LIST	137
 APPENDIXES	
Appendix I. Glossary of terms and acronyms used in this study	154
Appendix II. Letter of invitation	156
Appendix III. Participant consent form	157
Appendix IV. Interview schedule	159
Appendix V. Interview transcript M.	162
Appendix VI. Example of stage in data analysis	182

LIST OF TABLES

Table I. Summary of structural models of flow	40
Table II. Summary of conceptual models of flow	41
Table III. Alternative (qualitative) and traditional (quantitative) criteria for judging research	69
Table IV. Section A. The experience and meaning of gaming online	75
Table V. Section B. The social experience and meaning of gaming online	75

LIST OF FIGURES

Figure 1. The three channel model of flow	30
Figure 2. The four channel model of flow	30
Figure 3. The eight channel model of flow	31

CHAPTER ONE

INTRODUCTION

“Twenty-three hundred years ago, Aristotle concluded that more than anything else men and women seek happiness” (Csikszentmihalyi, 1990, p. 1). We have made momentous leaps in our understanding of the world since Aristotle’s time, yet although we live in an age our ancestors could not have imagined, we, if Aristotle is correct, appear to seek the same thing they did; happiness. In our time there exist a plethora of self-help books, courses, websites and workshops purporting to offer the secret key that unlocks a life of meaning. Why then do so many of us still suffer from depression or other debilitating psychological conditions? Why with all our knowledge are so many spending their years anxious and bored, frustrated and unhappy? And possibly more importantly, what motivates those who do experience meaning and quality of life? Should we not be observing their activities, their behaviour and way of being in our postmodern world? According to Csikszentmihalyi (1990), happiness is a condition that requires preparation and cultivation and needs to be defended by each person privately. What makes us happy and how we enjoy ourselves will depend on who we are and how authentic we are prepared to be.

Computer gaming has been frowned upon. Computer gamers are often misunderstood and marginalised as „nerds“ or „geeks“. Much of their time having fun and being happy is spent in a world of binary code, intangible fluid images and “unreal-real” situations experienced through advanced technology. Considering that three generations ago this world and opportunity did not exist, makes it all quite fantastic. As computer gaming becomes more accepted and a mainstream activity, so academic interest has grown in the field. The introduction of social networking to the gaming platform has opened new possibilities and ways of interaction with a specific symbolic structure, sub-culture and language developing as will be shown in the literature review.

This dissertation will apply an Interpretative Phenomenological Analysis (IPA) in exploring how gamers experience and make sense of their experiences gaming online. Online gaming has introduced the social element to gaming and many gaming communities have become established offering membership and the opportunity to experience the virtual through a group dynamic. This study explores this and many other aspects relevant to this dynamic

field that millions globally engage in daily. Reflecting for a moment about what brings us great happiness or deep sorrow, chances are we will think of our experiences in relationships with others. We can question if this is any different in relations that gamers experience online in the virtual playground? Exploring this leisure activity and the social and online personal dynamics that arise through the introduction of social networking to the platform of gaming, is an area of exploration this thesis aims to address.

The literature review is presented in two sections. Firstly, chapter two of this study presents a review of gaming online. The reader is introduced to the domain of the virtual playground through theory and philosophy. Heidegger's critique of technology provides a philosophical framework. In unpacking the concept of virtual reality and cyberspace we draw on Lacan's theory of the mirror stage according to Taylor (2003). Damasio's (1999) levels of self, provides the foundation for discussion of the experience of the mediated environment through the concept of presence and *being* in the virtual. The second section, chapter three, presents the theory of flow by Csikszentmihalyi (1975), and considers the research that has been conducted studying this phenomenon, particularly when experienced online. A discussion follows in chapter four when qualitative research and the methodology, IPA, as well as the process of the study is described. The philosophical underpinnings of the method used in the study are presented. Chapter five, results and analysis, presents a synopsis of the complexity and experience of being a gamer. Extracts from the participants transcripts are used to illustrate the themes that emerged. Chapter six explores the participants' experiences as presented in the findings and relates them to the theory and research presented in the literature reviews. This study concludes in consolidating its strengths and weaknesses as well as identifying opportunities for future research. A glossary is included as Appendix I as an easy reference to the terms and acronyms used in the study.

CHAPTER TWO

GAMING ONLINE: A LITERATURE REVIEW

2.1. Introduction

The primary aim of this thesis is to explore and gain an understanding of the complexity and content of the meanings ascribed by gamers to the experiences of playing online games. The researcher will investigate i) whether or not the phenomenon of flow is experienced by participants in the virtual playground, and, if present, ii) the nature of the phenomenon within this context. This chapter serves to conceptualise the virtual playground, online gaming and the gamer. Chapter three will discuss the theory of flow. A theoretical context is provided which offers the reader the opportunity to contextualize the phenomenon under study, flow, in this domain, virtual reality, through the activity of online gaming.

The literature review begins by briefly outlining the role of technology in our postmodern lives. Discussion on the meaning of technology follows a consideration of Heidegger's view of the technological way-of-being. As the broader context of this dissertation is the Internet, this together with advances in digital technology is then focussed on, specifically virtual reality and cyberspace. In attempting to understand and uncover these concepts, how they are experienced, as well as what they mean for the gamer, the psychological aspects are considered according to the view of "mirror images". This leads to Lacan's theory of the mirror stage and the process of identification. Ultimately what becomes apparent is that a technologically mediated experience requires imagination, creativity and social exchange. All of which is called upon in the world of digital games. The literature review explores the virtual playground providing an overall view of the context of gaming online.

With this understanding of the „world of gaming“, the gaze shifts to how this is physiologically and psychologically experienced. The concept of presence and Damasio's (1999) three levels of self are drawn upon to provide a theoretical frame for these experiences. A discussion continues on consciousness, presence and different outcomes of experience. Research suggests that high presence may lead to the experience of the phenomenon of flow.

Chapter three discusses and debates Csikszentmihalyi's theory of flow (1975), which is the main theoretical foundation of this thesis. Activities that improve our quality of life are usually gratifying and enjoyable to us when they reflect our authentic life themes. This topic is explored and the section reaches an end considering the pros and cons of flow in the domain of gaming.

Whilst compiling this section of the literature review it became apparent that most studies of flow and the web focussed on the individual's experience of an autotelic activity. As the interest of this thesis is also in the experience of flow in a social context, online gaming, the early theoretical framework of autotelic relationships by Csikszentmihalyi (1990) is presented in chapter three. The characteristics of flow in the context of the family are discussed. Online gaming did not exist when Csikszentmihalyi wrote about autotelic relationships and there is an absence of literature, to the researcher's knowledge, dealing specifically with this situation. A research aim of this thesis is therefore to address this issue and to explore its relevance and meaning within the context of online gaming.

A summary follows of the research that has been conducted on flow and the human-computer experience highlighting discrepancies in flow models. Flow has been measured in different ways and research has shown that a qualitative method is a relevant and worthy approach to studying this phenomenon. To conclude, the main points of the chapter are highlighted and further multidisciplinary research in the field is encouraged.

2.2. Technology and the pursuit of the good life

The 21st Century places us in a fragile world where the stability and security of global social, political, economic and climatic conditions do not appear to exist. One constant in our world, which evolves to reflect the current cultural, social and technological milieu of the time, is our need to engage in leisure activities, to play games, to have fun, to pursue the good life.

The golden dawn of our technological age is reflected in the rapid advancement, desirability and accessibility of the hardware and software of the gaming system. Broadband and high speed internet connections have assisted in creating a dynamic and fluid online world. With the press of a button we turn on our computers, log onto the internet, and the world we encounter and interact with offers us an alternative reality and environment to participate and

play in. As we cross over into this digital frontier we are able to do many things. The world, or space, we enter constantly transforms and is co-constructed by all who have access to and engage with it; creating a virtual society. This manifests, according to Gackenbach (1998), as virtual libraries, museums, teams, corporations and communities which become entrenched, shaping the future of this society. As a member, we are able to not only search for information and resources, have electronic mail, converse with others and establish intimate relationships based on (voluntary) anonymity; we can also do banking or go shopping for merchandise, drugs, sex and god; we may be entertained, educated, or go to virtual therapy; we can earn a living as well as build new identities, communities and networks to participate in. The rapid development and tremendous progress in computing power and efficiency of information systems and applications has increased profoundly over the last two decades with communication and information technology being connected to almost all activities humans engage in, including play and leisure activities (Wimelius, 2004).

Buckingham identifies the changing uses of digital technology as not only “purveyors of information” but also as carriers of “images, narratives and fantasies that work on the imagination as much as the intellect” (Buckingham, 2007, p. 78). Information technology can be perceived and explored as a horizon of action and meaning (Smith, 2009). Research of the experiences of online computer gaming, a highly popular form of entertainment occurring in a technologically mediated social environment, has become relevant. Murphy explains that traditional competitive and co-operative game experiences in our society have not been replaced by online gaming experiences; it is rather that online gaming affects a significant number of children, teenagers and adults. She emphasises that “evidence suggests that their influence is, and will continue, to grow rapidly” (2007, ¶ 14). According to Snyder and Lopez (2007), play introduces us to the physical, emotional and social skills needed to make the most out of life. They suggest that it can be regarded as a mastery of skills, form of practice or proximal growth.

The emerging field of Ludology is defined as the study of digital games, or more precisely, play, with major contributors researching how we understand games in our digital culture and the implications gaming has for us in our post-modern world (Moulthrop, 2004). The field is multidisciplinary and has moved beyond psychological research that focuses exclusively on the negative effects of playing computer games (Fromme, 2003; Murphy, 2007).

Researchers are claiming that skills for the 21st century are developed through this new medium and the online social interaction experienced in Multi-Massive Online Games (MMOG's). According to Murray (2004), the digital medium is the appropriate locus for exploring and enacting the puzzles and contests of postmodern inner life and that of the global community. These new ways of interacting and playing in this environment, both on an individual and interpersonal level, provide fertile ground for research into the psychological experiences of Human-Computer Interaction (HCI). This thesis will explore aspects of the theory of flow (Csikszentmihalyi, 1975) and HCI in the context of online gaming as it is experienced by South African gamers.

2.2.1. Technology and meaning

Nusselder (2006) states that technology is related to particular artifacts, for example, the computer, and to the process of invention, creative design, and functionality, as well as the knowledge required to achieve the specific technological artifacts we desire. The artifacts we create are the tools through which we express our knowledge and with which the symbolic and physical world we inhabit is created (Downes, 2005). According to Heidegger, the essence of technology is "by no means anything technological", he states that, "we shall never experience our relationship to the essence of technology as long as we merely conceive and push forward the technological, put up with it, or evade it" (1977, p. 4). The essence of technology can rather be understood as an "all-pervasive framework (*Gestell*) under which we stand in the modern era" (Hoeller, 1988, p. 157).

Various researchers and academics agree that Heidegger holds the key to what our position as humans in this postmodern technological era is and how we should proceed from the foundation of that understanding. O'Brein (2004) explains that for Heidegger, how the world appears to us is of our own choosing and making and the notion that we are essentially in control of modern technology is of concern. Dreyfus elaborates saying that Heidegger's concern was not so much for the human distress arising from the destruction caused by specific technologies, but rather the technological understanding of being (n.d. ¶ 61). He highlights Heidegger's critique that technology does not make sense if isolated. The objects and our experiences of them are inseparable and reflected in our being-in-the-world, which Heidegger calls *dasein*. (A detailed account of *dasein* is presented in the methodology chapter.) Smith (2009) presents Dreyfus's interpretation of what Heidegger is suggesting.

This is that solutions and technological devices show up as meaningful due to the horizon of everyday practice which is often forgotten and assumed.

To understand technology then, it is necessary for us to „return“ to this horizon of meaning that made it show up as the artifacts we desire, need and want. It is also necessary for us to reflect on how these technologies may reveal, or disclose us (Smith, 2009). According to Heidegger it is only when we focus our attention on the fundamental characteristic that it is revealing, “does that which is new in modern technology show itself to us” (1977, p. 14).

A phenomenological approach based on Heidegger’s view, claims that the artifacts and a technological disposition, mood or attitude is necessary for the artifact to appear meaningful. This discloses the world beyond simply the presence of such artifacts. Society and technology can be seen to co-constitute each other and are each other’s possibility and condition to be (Smith, 2009). Tabachnick (2006, p. 106) explains:

Even though technology is what threatens us the most, it is also the thing through which we might again appreciate the disclosure of being. When we come to realize, through our own reduction to standing reserve, that we do not control the revealing of technology, but merely participate in that overwhelming revealing, we may be able to return to a more authentic and free relationship with technology, and thus with being itself.

Considering this thesis, Heidegger’s approach enables us to see and understand the experience of playing computer games online as an intimately connected, multi-dimensional, socially-embedded life-world that is part of, and not separate from, our “already always and embodied situated world” (Vieta, 2004, p. 2).

Franklin (1990) and Rowland (1997) state that once in use, technology has a complex relationship with the society it affects. It is, in turn, affected by the technological, social, and political context in which it is used (as cited in Ellerman, 2007). According to Galarneau and Zibit (2008, p. 18) we have experienced a cognitive earthquake due to technology. They explain that “with the introduction of each new technology, the techno-plates shift, requiring us to learn new skills and develop new competencies”. The potential value of information and communications technology to support human and economic development is a view upheld by many international agencies and development specialists. The significant digital

divide that exists between wealthy and developing countries has led to a debate about what can be done to enable those poorer countries to enjoy the benefits of this world (Shih, Kraemer & Dedrick, 2008). As this infusion of technology into society permeates and transforms our experience and the meaning of life and leisure, our role as researchers is to keep abreast with these tides of change and to investigate and explore this dynamic, shifting world.

2.3. A new world and space: The Internet and the World Wide Web

The Internet (Net) is an interactive virtual social space, a medium of communication which has become a high speed system of networks that is constantly expanding (Downes, 2005; Turkle, 1995). It is defined by Fenichel (2002, p. 6) as:

A channel, a medium or tool, which can be used as a powerful means of interacting with our world. Be it evolution or revolution brought about by human technology, it is not inherently evil nor is it bestowed with magical power to heal, in and of itself. It is not an alien phenomenon. It is part of our lives, in some cases an extension of our selves, and in perspective it is but one aspect of technology which we routinely integrate into our everyday 21st century lives.

As early as 1969, the US military together with the aid of civilian scientists designed and developed the internet (Hartley, 2002). It was characterized by scientific research, military interest and state funding. During the 1980s and 1990s this position dramatically shifted with the net developing into an integral tool for commerce (Gackebach, 1998). A hypertext system, introduced in March 1989, allowed for links in text to other text to become embedded and, in so doing, bringing previously separate systems together and enabling the innovation of the World Wide Web (WWW or Web) (Hartley, 2002; Hoffman & Novak, 2007; Pilke, 2004; Webster, Trevino, & Ryan, 1993). By the mid-1990s, this graphically driven process allowed the layman and non-technical individuals to use their personal computers to communicate by text as well as sound and picture (Downes, 2005). Technically, when we log online, information is carried back and forth via telecommunications infrastructure (the line) through a modem.

Advances in digital technology have made it possible to convert sounds, pictures, characters and motions into computer language. Gackebach (1998) states that it is through the codification of data, which includes numbers, text and multimedia digitalization, that we are

able to be less location and time dependent when interacting with the digital world. Relating this to computer games, Taylor (2003) states that they are more than the sum of their code as: “They are experiential spaces generated through code and the player’s interaction with the execution of that code through the medium of the screen” (§ 1).

Researchers across disciplines have taken notice of how we explore, develop, produce and participate in alternative, often compelling, experiences mediated through the constantly evolving WWW (Takatalo, 2002; Yee, 2006). Chen (2004) describes the Web as a distributed multimedia environment creating a virtual world that allows users to navigate, play and experience pleasure inside an invisible space. Immersion, interactivity, perceptual realism and engagement are principle properties that distinguish digital environments from other media (IJsselsteijn, 2002). Opportunities for participation, in which individual choice and action influence the display on the screen, are possible. The Web, with its independent spatial qualities, enables us to navigate our experiences and the virtual spaces in a responsive environment (Downes, 2005).

2.3.1. Looking in: Virtual reality and cyberspace

As previously discussed, virtual reality (VR) provides a responsive and interactive environment. As a user we participate actively within a computer-generated 3-D virtual world (Riva, Castelnovo, & Mantovani, 2006). This inclusive relationship between the participant and the digital environment is, according to Lauria (1997), the essence of VR. The components accepted as central to all 3-D virtual reality systems therefore include imagery, behaviour and interaction as well as navigation and exploration in cyberspace (Marsh, Wright, Smith, & Duke, 2007).

Fenichel (2002) defines cyberspace as a psychological construct. It is „invented“ individually, by the user, and collectively, as an online society. This determines and describes where experience takes place when individuals interact via computer and the internet. As technologies develop and become advanced enough to convincingly portray imaginative spaces, the immersive and interactive qualities of virtual reality emphasize a strange tension between reality and representation. When we log into cyberspace we experience the “death of distance” as space collapses when one’s physical and virtual location merge (Downes, 2005). One’s geographical (physical) location and the constraints of time and place are overcome as

through technological advancement we are able to log into the Web almost anywhere, anytime in the industrialized world. Cyberspace, according to Shields (2003), provides us with an example of binding the concrete, virtual, the abstract as well as the probable, into a complex whole, which impacts on everyday life in a measurable way.

An approach to cyberspace, put forward by Suler (1999) in psychoanalytic terms, is that it is a type of space that is transitional and extends the individual's intrapsychic world. It is experienced as an intermediary between the self and the other. The other is part self and part other. It is both our creation (self) and what is present in the virtual (other).

2.3.2. The screen as mirror: Identity and cyberspace

According to Turkle (1995), our ideas about mind, self, body and machine are affected by this emerging culture of simulation. She states that it is necessary to understand experiences on the internet as part of a greater context where boundaries between the virtual and the real, abstract and concrete, inanimate and animate, as well as the unitary and multiple self, are explored and invented as we go along. Nusselder (2006, p. 131) discusses Turkle's point that "cyberspace is a new playground for giving form to our desires" and states that it may also function as a virtual space where we "unconsciously reflect images of ourselves that function as a „framework“ for our relation to others" with the screen mediating our experience whilst functioning as a new medium for self-construction. A fundamental opportunity identified by Lauria (1997) is that virtual realities may allow for the investigation of alternate realities in a psychological sense. As van Ommen (2009, p. 48) states:

Through technology we (and, it must be noted, the capitalist order) are dispersed, extended, supplemented, dispatched, smudged, networked, entertained, communicated, and distributed across multiple sites as never before. We, as malleable boundaries, are always en route identities, never final and static, always partial and immersed.

Nusselder (2006) states that through the products of digital technologies we gain self-identity with the computer screen functioning as a mirror. This view is in accordance with Shields (2003) who conceives of technological images as mirrors in which we look for an identity. We relate to the image presented on the screen. Nusselder (2006, p. 205) explains that we find self-images in the screen and then attempt to shape the world accordingly. This approach he acknowledges is a Hegelian position of technology. This he describes, drawing on Coolen (1992), as: "an objectification of our self-understanding: we externalize the image that we

have created of our being”. It is through fascination and the hypnotic effect of the image on screen, that virtual reality if embraced openly, offers the opportunity to integrate this new sensation into a new sense of self.

Suler (2002) explains that an individual’s identity embodies multiplicity and that cyberspace enables the person to find a niche for the different and specific facets of selfhood with the potential for self-actualization. For him we are able to „deconstruct“ ourselves online as we are not required to present ourselves completely.

How we represent ourselves in cyberspace is thought to not be a purely conscious choice with individuals “differing in how much their unconscious needs and emotions surface in their online identities. A person usually selects a username or avatar on a whim, because it appeals to him, without fully understanding the deeper symbolic meanings of that choice” (Suler, 2002, p. 2). Our experience of cyberspace allows for transference reactions and fantasies to be projected into this space. According to Suler (1999), under ideal conditions this space is used by individuals for self-awareness and identity exploration. However, this psychological arena can also be used to vent the frustrations, anxieties, and the desires that feed our fantasies.

As we identify with mirror (screen) images, so the ego and alter ego open up in cyberspace with the virtual world divided into „self“ and „environment“ (Nusselder, 2006). The alter-ego can be recognized in the „technological mirror“ as an avatar, where we project our sense of identity on to the screen. The opportunities for constructing an avatar or character are limited only to the programme and the imagination of the user. The creation of one’s avatar involves the construction of (virtualized) reality, illustrating the psychological factors involved. This sense of being „me“ in the virtual is determined by the “technological visualization of sensory stimuli into a second world in which I recognize myself” (Nusselder, 2006, p. 135). Results from a study by Kim (2009) suggest that although virtual representations may not resemble actual appearances, it is possible to identify with others who share similar characteristics in cyberspace. His findings highlight that internet users enjoy being someone else or being anonymous on line. This, Kim states, might also suggest that “sharing the same self-representation in cyberspace allows people from diverse social and ethnic backgrounds to get

over their differences, identify with one another, and even interact with one another without much prejudice” (p. 94).

2.3.3. Lacan’s theory of the mirror stage

We can draw on Lacan’s theory of the mirror stage in attempting to understand this process of identification. Presenting Lacan’s theory, Nusselder (2006) discusses how the unconscious is not only obscure, deep and dark inside of the self, but also comes to being in externalization. He states that through the avatar, one is able to identify unconscious intentions which happen at the interface. In bringing them into an intersubjective dimension they are felt to become manageable and encourage the experiences of fascination and excitement. Applying Lacan’s theory of the mirror image shows how, “fascination implies an (unconscious) absorption in something (a virtual image) that the subject itself is not (in the real)” (2006, p. 137). This relates to what Suler (1999) referred to as the other [the subject] being „part self and part other“.

Olivier (n.d.) discusses Lacan’s theory of the mirror stage as a metaphorical account of early childhood development during which the infant recognizes in its own mirror image the wholeness and unity that it, as a being, lacks at a time when it is still to a great extent, physically uncoordinated. According to Taylor (2003), Lacan’s mirror stage is understood as an identification relating to both the initial development of the subject and when “the subject sees herself in another image and then incorporates this into her imaginary integrity” (§ 14). Taylor suggests that within the context of computer game play the player exists in simultaneous multiple spaces. This is illustrated as the “player exists as the subject in one field and then projects into the field of the game space” (§ 5). Discussing Lacan’s theory of the mirror stage, Taylor addresses how, while the player has an embodied identity, “the field of visual perception is outside the subject and is then embraced by the subject as being internal when the subject perceives itself within that field” (§ 13). This implies a type of identification. It is necessary for the player to identify themselves sufficiently with the avatar, characters or objects of the game to fully participate and respond to the game. This is done through inserting a self-image into the constructs of the game which is then internalized by the player.

2.4. Imagination and identity construction

Will Wright (2008), the designer of many computer games, states that player creativity is being included in contemporary game designs allowing players (gamers) the opportunity to become partners in building and inventing aspects of the virtual world. Online communities develop around these activities with games not just perceived of as a form of entertainment media but as a vehicle for self-expression. Games will, according to Wright (p. 2), become a “visible, external amplification of the human imagination”. Baylis (2005) links imagination with creativity and defines it as the mental process (all-purpose) that we use to solve problems or conjure up possibilities. He quotes Nobel Laureate, Planck (1949), as writing that “the scientist must have a vivid intuitive imagination, for new ideas are not generated by deduction, but by an artistically creative imagination”. Lauria (1997) states that the imagination is foundational in virtual reality. It is reflected in constructing the virtual space through a technologically mediated experience, which is an artificial experience ultimately calling upon the imagination.

The virtual places of cyberspace provide environments and play spaces for experimental interactions of lasting importance to occur. According to Downes (2005), these places are not substitutes for reality, but real spaces, even though they are not where the majority of main society lives. Mantovani and Riva (1999) propose a view of reality from the paradigm of social constructionism. It is seen as being continually negotiated through cultural mediation and social interchange through the use of shared cultural codes composed significantly of symbolic references. The encounter with the symbolic and imaginary through language and image enables human destiny to unfold through a technological medium. According to Dreyfus (n.d., ¶ 18), once we “become accustomed to the age of the Net, we shall have many different skills for identity construction, and we shall move around virtual spaces and real spaces seeking ways to exercise these skills, powers, and passions as best we can”. Much time is spent by individuals in cyberspace and increasingly more people are using the internet for leisure activities. The realm of the online virtual playground and the games that can be played there and their related potential experiences will now be explored.

2.5. The online virtual playground

From what has been presented online gaming may be considered to be an important field to study. According to Humphreys (2003), computer games drive innovations of technology,

functionality, design, interface and the development of complex graphics spreading beyond the gaming media. This is supported by Fromme (2003) who suggests that what is required is an understanding of how computer games are integrated into the lives of young people thus going beyond media-centred approaches. Murphy (2007) claims research in this area has in the past been exclusively focused on violence and the effects of the violent content inherent in many computer games. He suggests that the widespread popularity and intense level of participation often required in computer gaming warrants psychological research on the effects of game participation on individual and social behaviour.

The possibility of communication offered by the Internet and the interactivity it supports has changed the world of digital games (Gackenbach & von Stackelberg, 2007). Current academic interest in games is, in the view of Myers (2006), strongly driven by the video game industry's commercial success. Considering annual turnover exceeds Hollywood revenues and that the total revenue of the worldwide game industry was projected by Price Waterhouse Coopers to reach \$54.6 billion in 2009, gaming can be perceived of as „serious business“ (Humphreys, 2003; Rise of the Participation Culture, n.d; Steinkuehler, 2004). This successful industry is clearly supported by millions of people who devote a significant amount of time and their financial resources to playing them. Murphy (2007) reports that in 2006, the multi-massive online game, World of Warcraft, (WOW), was regarded among the most lucrative entertainment media properties, generating more than \$1 billion in revenue. The setting for WOW, Azeroth, had a population at that time greater than that of Portugal (Watson, 2009). According to Flynt (2006), computer games represent a pervasive and powerful medium that has been adopted by millions of people as an important way in which to relate to the world. Hours and hours are invested and dedicated to playing games which he states, shapes the way the player negotiates and perceives reality.

2.5.1. Why and what to play: Genres of games online

In the past online gaming was a hobby pursued only by those with technical expertise and access to the technology required. A well-known example according to Voiskounsky, Mitina and Avetisova (2004) and Bartle (1990) are Multi-User Dungeon or Multi-User Dimension (MUD's) text-only virtual environments. These role-play games are in the form of an adventure game based on fantasy books, movies or original content. Gamers choose a certain character to represent them during game play and a central goal is to develop this character to

their maximal level. Interaction within the gamers' communities can also be recognised as a relevant goal.

There are many genres of games in contemporary gaming to select from, these include but are not limited to: Adventure, action, puzzle, racing, fighting, role-playing, platform, simulation, sports and strategy. Jenkins (2008) explains that not all games tell stories, nor can the gaming experience be reduced to simply the experience of a story. Games may be experiential, expressive or abstract. Byron, Curran and Mc Carthy (2006, p. 9) describe the landscape of gaming in the virtual playground:

It is interactive, it tells stories, it can be wholly abstract, and it is bright and dark and fast and slow. It has the capacity to be as touching as it is thrilling, as beautiful as it is horrifying, and it can show as much grace and elegance as it can demonstrate impact and destruction. And you are always in charge, and we have no doubt that someday it will rule the world, someday everyone will play...

A breakthrough in videogame design is The Sims. This game simulates human life and relationships and has been described as a psychological or human behaviour simulator. According to Pearce and Howard (2004) the game viewpoint is isometric allowing gamers to have a god-like view over the game terrain, the avatars or characters are semi-autonomous as although they have innate behaviours, they rely on the gamer to influence and dictate their actions. Frasca (2004, p. 93) states that "unlike narrative, simulations are a kaleidoscopic form of representation that can provide us with multiple and alternative points of view". In accepting this paradigm, he suggests that gamers may realize alternative and other possibilities to dealing with their social and personal realities which may lead to the development of a tolerant attitude. Sims 3 has introduced a new game play factor adding a psychological dimension to gaming. It is called "Lifetime Wishes", which are long term career goals based on whatever traits the Sims possess. Pursuing these lifetime wishes will provide a structure to the game for those desiring it.

In contrast to the Sims, we have "first-person shooters" (FPS), which is applied to many genres of games that present a first-person perspective where one's view on the screen, is the front end of a weapon (Penny, 2004). These games involve playing with a virtual gun with the aim of killing, destroying and maiming another player's character or beast in the game. A team-based FPS, Counter-Strike: Source, is the most competitive online shooter available.

Murphy (2007) reviews the dominant issue in the literature that FPS games teach people how to kill and exposure to the violent content encourages aggressive and hostile behaviour. He concludes stating that research has not found a reliable link between aggression and violent games although such games tend to increase access to aggressive cognitions. According to Murphy, “ if the game play experience is perceived as a social event that resulted in co-operation and the attainment of group goals, the player might learn skills such as teamwork and communication rather than learn to be aggressive and hostile, despite the presence of aggressive thoughts” (p. 24).

Considering the argument that the engagement with these games results in learned responses that if triggered, transfer to the real world, Penny (2004) discusses how the FPS game Quake, which elicits adrenaline rushes and rapid reactions, on one level may be seen to improve hand-eye coordination at the computer console, and on another level, be effective in training skills that require rapid and reflexive behaviour such as in marksmanship. He argues that “the persuasiveness of interactivity is not in the images per se, but in the fact that bodily behaviour is intertwined with the formation of representations” (p. 83). The embodied behaviour of the gamer and the continual interaction between these representations is what makes these “images more than images”. Penny calls for the aesthetic and theoretical study of embodied interaction in gaming. He questions what behaviours are trained in these games, as with real training simulators, the players “become excellent shots” (p. 77).

Although the British Army leads the way in military simulation, in 1995 a modified version of the game Doom II was used by the US Marine Corp to train infantrymen in the key skill of marksmanship (Gorbold, 2009). This was followed by the release of their game, America’s Army in 2002. Virtual Battleship 1, is currently used by the Australian Defence Force and Virtual Battleship 2, released in 2007, has according to Gorbold, been adopted by several military organisations around the world, showing how off-the-shelf PC games with their „photo-realistic graphics“ have been developed and used by the military. It is highlighted by Penny (2004), that “while the electronic game industry vehemently counters claims that interactive electronic games have any real-life consequences; psychotherapists employ simulation technologies precisely because they have effect in people’s lives” (p. 74). A controversial battle has ensued with questions raised as to whether or not gamers are desensitized to warfare and the horror of violence through regular exposure of playing these

games. The other side of the debate is that there is no evidence that they incite violence and can be seen to actually foster social interaction and civic engagement (Mail and Guardian Online, 2008, September 21). It is necessary for researchers to find out how the gamers themselves perceive their experience of playing combat games and how or if these games do impact on their everyday life.

Playing games is an important aspect of human interaction and an integral part of our cultural and social lives (Rieber, 1996). According to Steinkuehler (2004), the increasing domination of massively multiplayer online games (MMOG'S) and massively multiplayer online role playing games (MMORPG'S) in the entertainment industry and their popularity among a diverse global population, suggest they are a major mechanism of socialization.

The World of Warcraft series, the most successful MMORPG ever, has more than 11 million people world-wide playing this adventure-filled game that has no ending (Martin, 2009). Martin states that WOW is so popular due to the endless questing and the way players are slowly eased into the action and given a sense of achievement. Players engage in grinding, which involves doing repetitive tasks to reach long term goals. Bartle (1990) and Humphreys (2003) state that interactive, multiplayer games are played primarily for fun in persistent social and material worlds. Although some of these games have a set of rules and an overall objective with goals, many are according to Steinkuehler (2004, p. 521) "loosely structured by open-ended (fantasy) narratives, where players are largely free to do as they please – slay ogres, siege castles, barter goods in town, or shake fruit out of trees". According to Moulthrop (2004, p. 63), the appeal of these games is that they are "configurative, offering the chance to manipulate complex systems within continuous loops of intervention, observation and response". Aarseth (1997) claims the pleasures of playing these games also include cognitive and functional satisfaction.

2.5.2. How to play: The process of gaming online

A general purpose computer and access to the internet is required to play online games which are highly graphical (two or three dimensional) and run primarily on a central computer exploiting the networking aspects of technology. Some games require a subscription; others are played at no cost other than that of the network. More than one person is able to play simultaneously and communication between gamers occurs in real time. The gamers interact

with other gamers via the internet. They are represented electronically through self-created avatars or characters. Commands may be issued independently by gamers allowing them to act upon one another and contribute to the game. The creativity of the player enables new and unpredictable outcomes with each log on. The games and the strategies required to play them allow co-creation with the gamers as co-producers. This enables them to be active and “influence the rules, affect the outcome, and create a rich universe of social interactions and culture that ultimately become the core of gameplay, rather than the periphery” (Galarneau & Zibit, 2008, p. 34).

Modding is a term used to describe when the gamer creatively and technically changes and shapes their gaming experience. It “involves taking the source code of the game and changing it to alter something about the game - anything from the location to the theme of the game, to creating new levels, new characters and new objects for the game” (Lenhart, 2008, ¶ 1). This advantage of PC games enables players to put in the time to add features and units to their favourite games which they then offer for free to other players to download online at a modifying forum or website (Watson, 2009). Lenhart, whose research shows that 36% of teen boy’s mod, gives the example of Counterstrike, which started as a mod for Half-Life and has been released as a separate game due to its popularity.

Understanding in computer games results from practice and play. As one interacts with the images of the game, one’s actions are shaped due to the underlying logic communicated through these images and their meanings which emerge. These meanings assist one in understanding a particular context or event, which in time, shapes the understanding reflecting the culture of the game. Active participation and interpretation is required in playing. The culture of the game can then be seen to merge with one’s own culture which is brought to the game as it is played (Flynt, 2006).

Hermeneutics, discussed in the Methodology chapter in this thesis, has relevance in discussing the playing of a computer game. It is suggested by Flynt (2006) that when one plays a computer game the experience you interpret is continuously generated as in the hermeneutic circle. “The experience you generate, combined with the interpretation of the immediate results of your activity, creates a context in which how you have interpreted the game (past) has bearing on how you can interpret the game (future)” (p. 35). It is with this

form of gaming, that the interpretative act is open and immediate in ways not evident in other media as the game is interpreted as it is interacted with.

2.5.3. Who is playing who? Relationships and gaming

According to Turkle (1995), playing one's character(s) and living [in these virtual worlds] becomes an important part of daily life for gamers. It is difficult to limit participation as much of the excitement of the game depends on having personal relationships and being part of the community's developing politics and projects. Interdependence is clearly designed into the games as mastery relies on skills beyond the manual accompanying the game. Hoffman and Novak (2007, p. 18), note the significant learning curve to gaming, suggesting games accentuate the role of challenge and skill: "skill acquisition and the seeking out of new challenges is a dynamic process which evolves over long periods of time in developing mastery in a virtual world".

Symbiotic relationships develop in these virtual environments and a distinct hierarchy between experienced players and new players (newbs) is reflected in this culture of learning. Steinkuehler (2004) reinforces Turkle's (1995) point that learning occurs through play and that it is through collaboration that focus is on the activity. Practice is coupled with immediate feedback from other gamers and the game system itself. Striving to achieve and improve one's game play is socially promoted and highly valued. A continual process of behaviour modelling allows gamers the opportunity to self-organize into communities with diverse groups of people with varied demographics and geographical physical locations. According to Putnam (as cited in Galarneau & Zibit, 2008) these networks are based on encouraging the emergence of trust in a social context and foster generalised reciprocity.

Humphreys (2003), states that it is through apprenticeship that gaming is mastered. Gamers, who have mastered the social and material practices requisite to game-play, assist and teach, through supported and scaffolded interactions, new gamers who lack such skill and knowledge. Games Masters are support staff who deal with in-game problems online (Martin, 2009). The process of self grouping involves skills such as negotiation, collaboration and self-marketing as well as awareness and understanding of the subtleties of etiquette operating within these virtual environments (Galarneau & Zibit, 2008). Yee (in press) states that "functional constructs within the environment facilitate these social

networks presented as: combat groups (temporary collaborations between a few users), guilds (persistent user-created membership organizations) and ideological alliances (agreements between guilds or „racial“ groups)”.

According to Shields (2003) online communication via chat groups, instant messaging, newsgroup postings and web homepages offer social platforms to connect with other gamers. Free-to-use applications such as Teamspeak 2, Ventrilo, and Skype offer gamers the opportunity to engage in voice communications with other players while gaming online (Hartup, 2009). Gamers depend on each other and invest a lot of time in gaming, which, according to Humphreys (2003), can be translated into social and emotional commitments. Social relationships sustain the games and it is noted by Hertz (2002) that it is the social bonds and connections that keep gamers playing. According to Yee (in press), there has been very little research exploring the formation of social relationships and derived experiences of gamers.

Social presence in gaming is supported in research conducted by Heeter (1992). He states that the connection with others in the virtual world is wanted more than any other experience and as previously discussed, that the evidence of other people in the mediated world gives evidence of the virtual world’s existence. This concept of presence will be returned to later in the literature review. It is worth observing that it is through interaction and participation with material and social resources in a community with particular values, goals and structures, that an individual “comes to understand the world (and themselves) from the perspective of that community” (Steinkuehler, 2004, p. 523).

Flynt (2006) explains that on a social level, when one plays a computer game one possesses the leisure time and finances necessary to enjoy and purchase an entertainment commodity. On a cultural level he states that one becomes accustomed to the medium selected as a means of understanding the world. This understanding of the world is refined through the sensitivities and patterns of thought the selected medium provides and shapes our understanding of ourselves and the societies and groups to which we belong. This extends to our interpersonal relationships. Kelly (as cited in Galarneau & Zibit, 2008, p. 48) states that many gamers describe a complex social and personal dynamic emerging in gaming as their characters are “judged by their actions” and friendships are developed through acts of

“spontaneous kindness” which results in them feeling as if they are progressing emotionally. Emotionally they consider themselves to be learning, growing and maturing from their experimentation with behaviour online. The virtual world is allowing them to reformulate their views of both themselves and others. Bartle (1990) suggests that online games have an emotional hold which is rooted in the gamer’s ability to project themselves onto their avatar. This results in the feeling that what is occurring to the avatar is happening directly to the gamer and for a period the game’s virtual reality becomes the reality of the gamer. The root of their appeal is that one exists in another world, the game’s virtual world.

2.5.4. Gamer motivation

According to Yee (2006), games are chosen for different reasons for different gamers and will have different consequences or meanings for them. He presents the results of his study looking at player motivation, as comprised of three main components. These being; „achievement, social and immersion“. Ten subcomponents are grouped and fall between these categories. An example is the main component „immersion“ which has as a sub-component „escapism“. This category includes the themes of relaxation, avoidance of real life problems and escapism from problems in real life. The main component, „achievement“, includes; „advancement, mechanics and competition“ as subcomponents. Categories included for the component, „social“, include; socialising, relationships and teamwork. The third component, „immersion“, is comprised of the subcomponents; discovery, role-playing, customisation and escapism. Due to the scope of this project the ten subcomponents will not be discussed in detail.

Research by motivational psychologists at the University of Rochester, contend that the pull of games psychologically, is due to their capacity to engender feelings of competence, relatedness and autonomy (Dickman, 2006). A conclusive link between a gamer’s engagement and game enjoyment was found by researchers Chen, Duh, Phuah and Lam (2006) who state that social interaction is a key factor determining engagement which underlies optimal enjoyment of game playing.

Studies by Weibel, Wissmath, Habegger, Steiner and Groner (2008) suggest that flow as a mental state of operation results in enjoyment while gaming online. The theory of flow and research conducted on flow in the mediated context will be discussed later in this chapter. It

is notable that gamers do have an “expectation to engage in achievement-oriented activity, often in collaboration with other players”, with the process of play requiring and leading particularly at high levels, to a “high level of achievement across various dimensions of both cognitive and social intelligence” (Galarneau & Zibit, 2008, p. 6). According to Webster, Trevino and Ryan (1993), flow within computer interactions involves intrinsic interest that accompanies the use of the imagination and cognitive arousal and enjoyment. The appeal and attractiveness of online games is also attributed to flow by Voiskounsky, Mitina and Avetisova (2004).

We shall continue to explore the possible intra- and inter-psycho levels of the experience of gaming through unpacking the concept of presence and the theory of flow. A return to the concept of presence and Damasio’s levels of self begins the journey.

2.6. Making it real? Presence and the mediated environment

The possibility to differentiate between a real and imagined situation is solved through the evolution of two different levels of consciousness identified by Damasio (1999) as core consciousness and extended consciousness. Core consciousness is defined as a biological phenomenon independent of memory, reasoning or language that deals explicitly with the present, the Here and Now. When we deal with information through imagining, planning and thinking, we are exercising extended consciousness (Waterworth, 2003). Extended consciousness allows us to distinguish between experiences, both imagined and real, of the internal and external worlds (Riva & Waterworth, 2003).

Drawing on research conducted in the field of IT (Information Technology), it is understood that mediated environments allow the participants control of certain aspects of the environment, and, consequently their perception of the environment. „Being there“ thus becomes the ability to „do there“ (IJsselsteijn, 2002). The concept of presence is defined as the „sense of being there“ or “the feeling of being in a world that exists outside of the self” (Riva, 2005, p. 25). The term telepresence describes the state of consciousness and extent to which one has the impression and feeling of being present in the mediated virtual environment as opposed to the immediate physical environment (Weibel, Wissmath, Habegger, Steiner, & Groner, 2008). A social category, co-presence, is included by IJsselsteijn, de Ridder, Freeman and Avons (2008) and is defined as the feeling of being with

others (and communicating). Heeter (1992, p. 4) refers to this as social presence with the central premise being that if others “exist in the virtual world there is more evidence that this world exists”.

Wright (2008) discusses how in computer gaming active involvement, imagination, creativity, problem solving, self-esteem and a sense of community is developed as players interact with advanced simulated characters, worlds and story lines. In line with this view IJsselstein (2002) conceptualises presence in an environment as extended to the possibility of negotiation and a cultural framework of both actions and their meaning. As reality is constructed cognitively and through our sense organs, what we accept as real is dependent on our understanding and perception of the environment. Whilst interacting in the world of computer displays a paradox occurs (Sanchez-Vives & Slater, 2007); knowing the „place“ and events to be fictitious from a cognitive point of view one responds both consciously and unconsciously as if the place were real. When our attention is allocated to the virtual environment, Botella, Banos and Alcaniz (2008) state that the participant thinks, feels and behaves as if the place were real and the events depicted as happening.

Mediated environments allow the control of certain aspects of the virtual space through real-time action (IJsselstein, 2002). This differentiates virtual reality from other media or communication systems as acting in the environment in virtual reality leads to a perceived reality of this environment. The patterned sensory impression is interpreted to be an extended object in an environment other than that in which it physically exists (Sanchez-Vives & Slater, 2007). Computer users experiencing this phenomenon report strongly feeling themselves to be in the virtual space rather than where they were physically positioned. (Biocca, 1997). Returning to gaming, Gallaway (2004) explains that the primary phenomenological reality of games is that of action requiring constant physical input by the gamer. The gamer is active controlling the mouse, and pressing buttons on the keyboard. He suggests that in a structural sense the gamer has a “more intimate relationship with the apparatus itself, and therefore with the deployment of realism...it is the act of doing, of manipulating the controller, that imbricates the gamer with the game” (p. 11).

According to Riva and Waterworth (2003) without a sense of presence the nervous system is unable to distinguish between the internal and external world which is a key issue for

survival. This is related not only to the physical body, it applies also to the cultural and social situations or spaces in which the self is included in everyday experience. Riva (2005), states that by being aware of meaning, as defined by a symbolic system, we are able to make sense of where we find ourselves. Physical, cultural and social boundaries thus monitor and influence the quality and possibility of experience and of action.

2.6.1. Presence and Damasio's levels of self

Conceptually presence is divided into three different layers that are phylogenetically different and strictly related to Damasio's (1999) three levels of self. These layers are unpacked by Riva, Mantovini and Gaggioli (2004):

- *The proto self*: A coherent collection of neural patterns that map, moment by moment, the physical state of the organism.
- *Proto presence*: An embodied presence related to the level of perception-action coupling. The more the organism is able to correctly couple perceptions and movements, the more it differentiates itself from the external world, thus increasing its probability of survival. In a virtual world this is sometimes known as „spatial presence“.
- *The core self*: A transient entity which is continuously generated through encounters with objects.
- *Core presence*: Can be described as the activity of selective attention made by the self on perceptions. The more the organism is able to focus on its sensorial experience by leaving in the background the remaining neural processes, the more it is able to identify with the present moment and its current tasks, increasing its probability of surviving. This is equivalent to „sensory presence“ and requires good quality, preferably stereographic, graphics and other display features.
- *The extended self*: A systematic record of the more invariant properties that the organism has discovered about itself.
- *Extended presence*: The role of which is to verify the significance to the self of the events experienced in the external world. The more the self is present in significant experiences, the more it will be able to reach its goals, increasing the probability of surviving. Extended presence requires intellectually and/or emotionally significant content.

Each level can be seen to have certain properties and solves a specific aspect of the internal/external world separation. The layers of presence are “strictly related to the evolution of self: proto presence (self vs. non self), core presence (self vs. present external world) and extended presence (self relative to present external world)” (Riva, 2005, p. 2).

2.6.2. The experience of presence

Physiologically experiencing presence involves perceptual, vestibular, proprioceptive, and the autonomic aspects of the nervous system being activated in a way similar to that in real life situations (Slater, 2003). The strength of the intensity of the presence feeling has been understood as the integration of three layers of the self. A high feeling of presence will be experienced with activating the three layers and the more they separate between internal and external so the quality of experience and action will be greater. Waterworth (2003) explains that when the contents of core and proto-consciousness are closely aligned with extended consciousness that the experience of presence would be maximised. When the three levels work together they produce a strong focus on the present environment. He continues to suggest that pivotal for this integration to occur is core presence.

Botella, Banos and Alcaniz (2008) outline the significance of meaning and emotions, suggesting that the individual attends to what are important for survival. In our everyday experience the sense of presence allows the nervous system to differentiate between internal and external states thereby effectively controlling its agency. Stimuli from the real environment need to be suppressed for the construction of and focusing on the virtual. This occurs as the user cognitively constructs a space in which the body can move in the virtual domain. Attention, concentration and focus on the virtual environment are isolated in the process. It is only in immersive virtual reality where all three layers of consciousness are modified by the media experience. “In experiencing an interesting immersive VR experience, proto (spatial presence), core presence (vividness), and extended presence (engagement) will be activated by the medium” (Riva, Mantovini, & Gaggioli, 2004, p. 10).

Slater (2003) refers to changes in the locus of presence as „breaks in presence“. When this occurs the duration of such changes depend on extended consciousness; attention is likely to be captured by whatever is most relevant to the goals of the extended self. This can be a stimulus from the real world or a mental event such as a sudden thought. Waterworth (2003)

explains that any mediated presence competes with presence in the real world and that breaks in presence are a result of rapid shifts of presence between the virtual, mediated world and the real, physical world. Riva (2005) hypothesizes that breakdowns are a sophisticated evolutionary tool which controls the quality of the experience determining which signals in which environment are attended to. The critical issue is what choice the person will make and respond to and how they will act. According to Caprara and Cervone (2003, p. 67), consciousness is at the core of prediction and control enabling individuals to contemplate and predict the behaviour of themselves and others, to “anticipate challenges and to maximise their personal resources and chances for success”. What matters most they state is the quality of consciousness and the conscious thoughts one has.

Botella et al (2008, p. 2) state that: “Wherever we are, we are always present, but the place where we feel present could vary (with different degrees of consciousness)”. Presence is, however, experienced outside of conscious awareness and we only become aware of it when we “come back from our absent mind”. It is suggested by Sanchez-Vives and Slater (2007) that the study of presence is a useful tool for the study of consciousness as technically it provides us with a virtual reality that can be manipulated in ways we are unable to in the real world, and conceptually, it restricts the study to a limited and specific domain which provides a more constrained frame of reference. IJsselstein (2002) reinforces this suggesting that explanatory questions be addressed through exploring the mental and neural processes that may underlie presence.

2.7. Chapter summary

Playing games is an important part of human development, socialization and interaction. The post-modern era has brought with it advances in technology and opportunities for engaging in new leisure activities that have been discussed in this chapter. Research together with literature and philosophy conducted in this field is presented as the foundation for this study. The field emerges as multi-faceted and this chapter has considered the psychological, neurological, social, cultural and technological dimensions involved in gaming. Damasio’s levels of the self and Lacan’s theory of the mirror stage were drawn on in unpacking, interpreting and understanding the experience of virtual reality. The concept of presence was explained to describe the experience of *„being there“* – online. The online virtual playground was explored and the context of this study described in doing so.

CHAPTER THREE

FINDING FLOW: A LITERATURE REVIEW

3.1. Introduction

It is evident from what has been discussed that presence can result in varying qualities of experience. Breaks in presence will result in a less involved response and experience, whilst high presence may result in an optimal experience called flow (Riva, Mantovani, & Gaggioli, 2004). The emerging field of positive psychology pursues researching, defining and applying what constitutes a good life and related positive subjective experiences. In this field we have Csikszentmihalyi's flow theory which offers the perspective that a good life is characterised by focus, complete absorption and enjoyment in autotelic activities and relationships. Relationships and activities are defined as autotelic if they are enjoyable and worth doing for their own sake regardless of external reward (Nakamura & Csikszentmihalyi, 2002; Schmidt, Shernoff, & Csikszentmihalyi, 2007). These experiences include flow which is gratifying and is characterised by a feeling of complete involvement, energized focus and the process of the activity being successful (Weibel, Wissmath, Habegger, Steiner, & Groner, 2008).

As the experience of flow refers to a subjective perception, Schmidt et al (2007, p. 543) state that "what matters most is that these conditions are salient to the individual, not necessarily inherent to the activity itself". According to Csikszentmihalyi (1990), an autotelic person's behaviour will be more flexible and consistent as what is done is not random. "One of the basic differences between a person with an autotelic self and one without, is that the former knows that it is she who has chosen whatever goal she is pursuing" (p. 210). Having the ability to sustain involvement requires discipline and determination as to achieve an optimal experience requires one to stretch oneself and overcome challenges.

This chapter begins with an introduction to Csikszentmihalyi's early research which provides the context from which to present and discuss more recent studies. Flow characteristics are presented followed by a discussion of the different models of flow. Exploring Csikszentmihalyi's theory further, we consider the concept of life themes and discuss how investing psychic energy in autotelic activities results in meaningful experiences, complexity in consciousness and self-growth. We are happy! This section concludes considering the

dangers associated with flow which are then considered looking at research conducted in the field of gaming.

3.2. “The Good Life”: Optimal experiences and Csikszentmihalyi’s theory of flow

Many respondents in Csikszentmihalyi’s (1975) early research on motivation used the metaphors of a current carrying one effortlessly and the sense of “flowing” to describe their experience in different activities. Hence the construct of flow emerged (Csikszentmihalyi, 1990). According to Bloom (2005) analogous terms include being „in the zone” (sport), being in „ecstasy” (religious mysticism) and being in „aesthetic rapture” (artists and musicians).

Csikszentmihalyi (1990) states that individuals preferentially engage in opportunities for action associated with a rewarding, complex and positive state of consciousness. Gaggioli, Bassi and Delle Fave (2003) explain that the individual, by means of differential investment of psychic resources and attention, organizes and selects information from their context according to quality of experience. The intrinsically rewarding and positive features of optimal experiences encourage replication of the associated activity in „a desire to replicate the experience’ (Schmidt, Shernoff, & Csikszentmihalyi, 2007). According to Voiskounsky (2007), people seek enjoyment and will continue to perform certain actions associated with experiencing flow which will have a strong positive impact on quality of life and lifestyle. Seligman states that eudemonia, the „good life”, consists of the roots leading to the experience of flow. He explains that in knowing one’s signature strengths one is able to recraft one’s life using them more. This introduces the opportunity for more flow experiences (Seligman, 2004). We shall return to the concept of signature strengths when we discuss life themes later in this chapter.

Riva, Castelnova and Mantovini (2006) explain that individual development within a given skill domain, is cultivated through optimal experiences. They present a strategy called the „transformation of flow”, defining it as an individual’s ability to motivate and guide fuller engagement in an activity through building upon optimal experiences. This is done as previously unidentified and new resources and sources of involvement are accessed. The related skills and challenges of the experience are continually improved with the individual searching for opportunities for action that are more and more complex. This is reinforced by Snyder and Lopez (2007), who state that absorption, persistence in and returning to an

activity, provides intrinsic rewards. They quote findings in research, conducted by Heine (1996), suggesting that persistence, commitment and achievement are associated with previous experiences of flow.

3.2.1. Flow characteristics

Snyder and Lopez (2007) describe the flow construct as comprised of the following dimensions which are interdependent and linked: Goals are intrinsically motivated and pursued regardless of any external rewards. There is intense and focused concentration in what is occurring in the present moment. Curiosity and a sense of control of one's actions are experienced and one knows how to respond to whatever happens. It is not so much that one has the skills than that one believes one has.

Researchers (Brown, 2006; Chen, Wigand, & Nilan, 2008; Csikszentmihalyi, 1993; Jegers, 2007; Sanchez, Gallego, Soriay, & Aborg, 2008; Snyder & Lopez, 2007; Sweetser & Wyeth, 2005; Voiskounsky, Mitina, & Avetisova, 2004; Wong, 2006) have identified the main elements of these characteristic dimensions of the flow experience as:

1. Clear and distinct goals and objectives with clarity as to what is required;
2. Immediate and appropriate feedback as to how well one is doing;
3. Personal skills and the capacity for action are well suited to and balanced between given task challenges and the opportunity for action;
4. Awareness and action merge; with deep and effortless involvement the usual dualism between actor and action disappears (i.e., loss of awareness of oneself as a social actor);
5. Concentration on the task with focus on the process is possible due to the activity having clear goals;
6. A sense of potential and full control over the activity and one's actions is experienced;
7. Loss of self-consciousness results in absorption; there is an exclusion of irrelevant stimuli and the concerns and frustrations of everyday life from consciousness. Concern for the self disappears but, paradoxically, the sense of self emerges stronger after flow;

8. Time distortion resulting in an altered sense of time duration where time seems to stand still, hours seem to pass by in minutes due to complete involvement and focused attention;
9. The activity is intrinsically rewarding with enjoyment as a positive affect, the end goal is an excuse for the process.

To maintain the flow state and experience, Snyder and Lopez (2007) state that a non-judgmental, mindful approach to personal performance may be necessary. Self-talk that involves criticism of performance and creates anxiety, as well as the many possible distractions from the outside world, would need to be overcome for flow to be experienced.

3.2.2. Models of flow

Early flow research and theory presented a three channel model of flow. The individual must be challenged sufficiently to encourage exploratory and playful behaviours (high challenge/high skill or low challenge/low skill). If an activity is too demanding (high challenge/low skill) anxiety may be experienced and if it is not challenging enough (low challenge/high skill) it will result in the sense of boredom (Csikszentmihalyi, 1975; Pilke, 2004; Webster, Trevino, & Ryan, 1993). Hoffman and Novak (2007) state greater empirical support has been found for formulating a four channel model. The change here is that flow is defined as only high challenge and high skills whilst low challenge and low skills is attributed to apathy. Figure 1 and Figure 2 are adapted from Pearce and Howard (2004) to illustrate this and are presented for comparison:

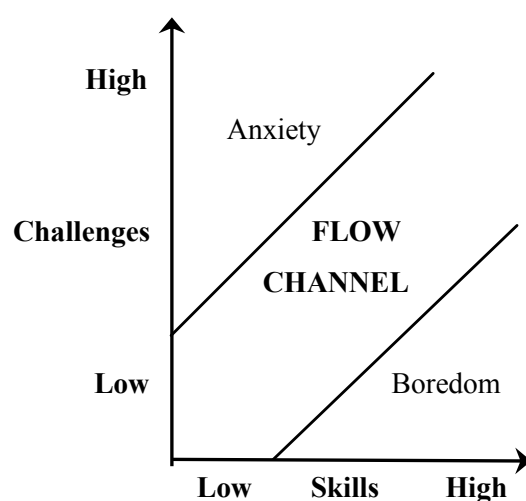


Figure.1. The three channel model of flow

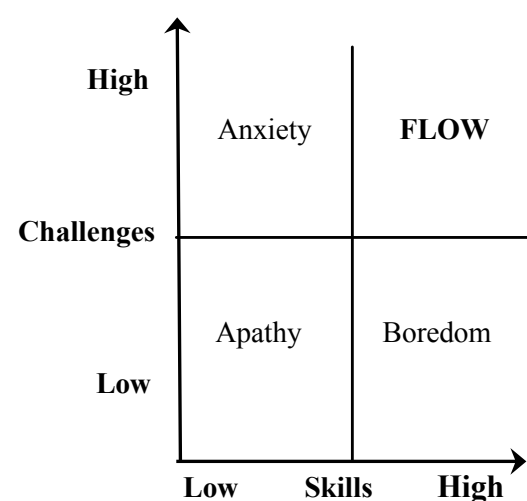


Figure.2. The four channel model of flow

The four channel model was extended by Massimini and Carli, as well as Ellis, Voelkl and Morris (as cited in Novak, Hoffman, & Yung, 1999). Moderate levels of challenge and skill were introduced. Arousal was identified as corresponding with moderate skill and high challenge and „control“ with moderate challenge and high skill. Nakamura and Csikszentmihalyi (2002) noted that individuals may choose low challenge activities for which they have high skill seeking to induce the state of relaxation. If an individual is motivated to play a computer game as a distraction from stress, it is likely that relaxation will be experienced, not necessarily flow. Figure 3, adapted from Csikszentmihalyi (1997, p. 31), illustrates this as the eight channel model of flow.

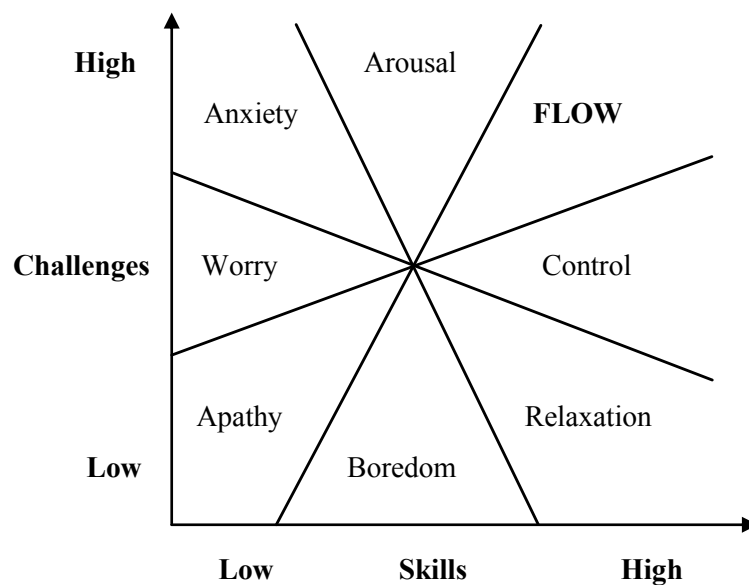


Figure 3. The eight channel model of flow

The importance of understanding flow experiences for web users is due to there being evidence suggesting that the behaviour of users is influenced by their holistic experiences with the technology and not just the usability of it (Pace, 2006). To better understand the flow phenomenon within HCI, Finneran and Zhang (2002) introduced a conceptual model which addresses the inclusion of a computer application. There are three distinct components to their model: Person, Artefact, and Task (PAT). This acknowledges that flow is experienced by an individual in the context of the task as well as the artefacts used. In separating the task from the artefacts they state that researchers are able to explore the factors influencing flow from different aspects.

3.3. Life themes and quality of life

In this section, we return to Csikszentmihalyi's theory to discuss the concept of life themes and quality of life. This is then related and applied to the field of gaming. It is through the preferential pursuit and cultivation of the dominant goals and interests reflected in an individual's life that a life theme is created (Gaggioli, Bassi, & Delle Fave, 2003). A life theme can be defined briefly as a set of goals that are linked to an ultimate goal. This greater goal gives significance to whatever one does (Csikszentmihalyi, 1990). A life theme therefore gives everything meaning, not necessarily positive or productive. It is necessary for the individual to choose projects and express themselves, based on what is genuinely felt and believed. This is then an authentic project and is usually intrinsically motivated (Csikszentmihalyi & Beattie, 1979).

A distinction is made by Csikszentmihalyi (2006) between discovered life themes and accepted life themes. Awareness of choices which come from personal challenges to define the purpose of life for an individual will reflect what has true value for the self; the script for these actions may be outside the norm. He states that if we know our desires and work with the purpose to achieve them, our thoughts, feelings and actions become congruent and we achieve inner harmony. Taking on a predetermined role with imposed goals created by other's expectations, agendas and intentions is likely to trap the individual resulting in psychic disorder and an accepted life theme of entropy. It is through controlling inner experience that an individual is able to determine the quality of their life (Csikszentmihalyi, 1990).

Personal development and growth is a result of optimal experiences guided by authentic life themes. When psychic energy is invested in meaningful, realistic, challenging goals which are attainable due to the match between skills and action, we are generally happier. Artz (1996) elaborates stating that a more complex self is created in the process as conscious energy is absorbed in a stable manner producing happiness that is long-term. According to Brown (2006), it is possible that intrinsic motivation associated with flow may have a significant role in an increase in perceived self-efficacy due to individual action changing the environment. The full involvement of flow then results in excellence in life and self-created happiness.

Csikszentmihalyi (1975) states that the happiness we experience leads to increasing growth and complexity in consciousness. This complexity is due to there always being a struggle in the optimal experience with the two processes of integration and differentiation, both necessary for complexity. The struggle has to do then with essentially opening and delving deeply into one (Csikszentmihalyi, 2006). It is noted that flow can drive individuals to outstanding achievement and high levels of creativity. The development of refined skills which is necessary to sustain enjoyment is what Csikszentmihalyi (1990) recognizes as significant and an important dynamic in the evolution of complexity and hence the evolution of culture and humankind.

If flow is to be a positive force for evolution, the dangers must be addressed. Csikszentmihalyi (2006) states how on the individual level flow can become addictive if the person becomes so dependent on one set of challenges that, when these are exhausted, their development is stunted and they feel helpless. At the social level, he uses the example of war. Soldiers may experience flow while at war and afterwards find civilian life boring. Flow may also be experienced in challenges that require the defeat of another. The ethical direction lies with the individual, as flow, “like anything else, is not „good“ in an absolute sense, but only in that it has the potential to make life richer, more intense and meaningful” (Csikszentmihalyi, 2006, p. 1). It is therefore necessary for a person to constantly re-evaluate what they engage in and to distinguish between constructive and destructive forms of flow, limiting the former and making the most of the latter.

Looking closer to the field of gaming, studies have been conducted in flow and have yielded interesting findings. Pathologically intensive game playing has often been viewed as an addiction to gaming. In a study by Wan and Chiou (2006), the motivational states of Taiwanese adolescents who were addicted to online games were measured. It was found that a „psychological high“ was not the explanation for these gamers’ high frequency of play. Further research by Wan and Chiou suggested that it is not enjoyment but rather the alleviation of dissatisfaction by the temporary flow experience of game play that resulted in some players gaming so much that they neglected other areas in their lives. Murphy (2007) explores this further stating that many online games are time and energy intensive as game design factors encourage this for the attainment of in-game goals such as wealth, prestige, influence and power. It is perceived that if a gamer is not experiencing feelings of self-

efficacy in attaining real life goals, that it is likely that a game may allow them to reach their goals in gaming. He states that “because it is a game, the strategy to achieve such objectives is much clearer and more highly-defined than in life, leading the unhappy individual to perhaps choose game play rather than other life areas as the vehicle for reaching his or her goals” (p. 26).

3.3.1. Friends, family and community: Autotelic relationships

Thus far this review has focused on the individual experience of flow. Our relations with other people have a profound effect on our quality of life which cannot be undermined. Csikszentmihalyi (1990, p. 189) states: “It is in the company of friends that we can most clearly experience the freedom of the self and learn who we really are”. We are enmeshed in a social milieu that not only shapes our behaviour, but according to Csikszentmihalyi (1997) can be seen to mould consciousness according to the aspirations and expectations of the culture we belong to. It is through the investment of psychic energy in goals shared with others that the individual is part of a family, in a friendship or invested in the larger community.

To experience flow in this context it is necessary for there to be a positive goal resulting in interactions that will increase the complexity of those involved. Here too, both differentiation and integration is critical. Each person needs to be encouraged to set personal goals, maximize their skills and develop their unique traits and self purpose. This is differentiation. Integration, according to Csikszentmihalyi (1990, p. 180), “guarantees that what happens to one person will affect all others”. Both group long-term goals and short-term objectives are required to be shared and to reflect, as much as possible, the goals of individual members.

Friendships are usually chosen on the basis of compatibility, complementary goals and common interests with the sense of self reinforced. A successful interaction requires the willingness to invest attention not only in one’s own but also in the other person’s goals (Csikszentmihalyi, 1997). Relationships can take on many forms ranging from the destructive to highly complex which encourage self- actualization. Optimal interaction is a relationship that instead of leading to psychic entropy leads to order in consciousness. It is through open communication in a setting of trust and unconditional acceptance with emotional security that relationships become meaningful and enjoyable (Csikszentmihalyi,

2006). Opportunities for clear feedback are necessary to reduce inevitable tension. As for any other flow activity the balancing of skills and challenges is critical in interaction. Recognizing the challenges related to selecting a goal, a system of action can be defined that highlights the necessary skills required. Behaviour is more flexible and consistent when there is dedication and commitment to the goals selected. When these conditions are met Csikszentmihalyi (1990, p. 185) suggests that individuals as members, will to a certain extent forget their individual selves and put aside their divergent goals to spontaneously focus their attention on the group relationship. This is done for the experience of “the joy of belonging to a more complex system that joins separate consciousness”s in a unified goal”.

Csikszentmihalyi (2000) identifies five characteristics of flow in the family context. He states that these same elements are required to create meaning and flow in one”s relationships with others and in one”s work:

1. Clarity: Knowing what is expected from one in relationships;
2. Centring: An interest is shown in what is being experienced and done in the present;
3. Choice: There is a feeling that there are a variety of possibilities from which to choose;
4. Commitment: A sense of trust is experienced that allows one to become un-self-consciously involved setting aside one”s shield of defences;
5. Challenge: Opportunities for action provided become increasingly more complex.

In cyberspace it has been identified that social interaction or interpersonal communication through social networking platforms is of the most popular activities (Kim, 2009). According to Kolo and Baur (2004), findings in their research strongly support results from studies by Jakobsson and Taylor (2003) and Laber (2001). They highlight that the production of social networks is one of the most important aspects of playing games online, providing social structure and a sense of community. As there are fewer social context cues such as demographic information, intonations, gestures or facial expressions in online interaction compared to physical interaction, it is of interest to explore the dynamics of online autotelic relationships and group identity and how these manifest without the cues we usually rely on.

3.4. Research, optimal experiences and the web

To summarise thus far, flow is defined as a subjective phenomenon that occurs when engaging in intrinsically rewarding activities that stretch talents to levels that are personally satisfying, in which one forgets the passage of time and loses track of oneself (Snyder & Lopez, 2007). Several researchers see the role of flow as a significant mediator in attitudes towards and in the use of computers (Artz, 1996; Chen, Wigand, & Nilan, 2008; Finneran, & Zhang, 2002; Hoffman & Novak, 2007; Jegers, 2007; Wong, 2006). In assessing the impact of computers on the quality of life, Artz (1996) suggests that how this form of technology impacts on personal goals, contributes to disorder or order in conscious energy and what the opportunities for personal development are, needs to be addressed. This is reinforced by Gaggioli, Bassi and Delle Fave (2003) who encourage research on the quality of experience associated with VR, particularly the long term benefits and disadvantages for human development and the use of this technology.

As has been discussed, cyberspace can be likened to a virtual playground offering each participant time to be entertained, interact with others, explore and express their imagination and self, with the possibility of experiencing the highest level of presence and positive experience through flow (Godley & van Niekerk, 2006). Riva et al. (2006) propose that within this context of the virtual that the flow experience, induced by a high level of presence, may be used to trigger empowerment. Four subjective characteristics that are required for the experience of flow have been presented as: Above-average concentration in the moment; the merging of action and awareness; a sense of control, as well as a distorted sense of time (Anderson, 2004). Transferring this to HCI, Trevino and Webster (as cited in Webster, Trevino, & Ryan, 1993, p. 413), state that flow incorporates the extent to which;

- (a) the user perceives a sense of control over the computer interaction,
- (b) the user perceives that his or her attention is focused on the interaction,
- (c) the user's curiosity is aroused during the interaction, and
- (d) the user finds the interaction intrinsically interesting.

Using the Web may in certain situations, according to Chen, Wigand and Nilan (2008), become an autotelic activity that through engagement can be intrinsically rewarding, generating feelings of enjoyment and the improvement of the positive affects of the Web

user. The user is assumed to be in the flow state once their “navigation can be characterized by a seamless sequence of response facilitated by machine interactivity and accompanied by a loss of self-consciousness” (Chen, Wigand, & Nilan, 2008, p. 2).

3.4.1. Measuring flow

Much research has been carried out on the experience of flow in different situational contexts using different measures. As flow theory presents an interactional viewpoint acknowledging the person in context and recognizing that experience is a product of interaction with the environment at that moment, empirical studies are difficult to accomplish (Schmidt, Shernoff, & Csikszentmihalyi, 2007). Early investigations of flow relied on qualitative data gathered through open ended interviews. Paper and pencil questionnaires and surveys were subsequently employed. The Flow Questionnaire was specifically designed for the study of optimal experience investigating the occurrence, phenomenology, and associated situations and activities of this experience (Finneran & Zhang, 2002).

To overcome the problem of estimation errors and recall, the development and use of the experience sampling method (ESM) is most often used in current research (Chen, 2004). This technique involves surveying individuals wearing an electronic pager who are randomly beeped approximately eight times a day. Respondents immediately recorded these representative moments completing a standard survey describing what activities they were doing and the way they were feeling when interrupted. External dimensions such as the situational context, companions and activities as well as internal dimensions including feelings and thoughts are captured. A digital version has evolved which is integrated into the Web environment. A small window appears on the participants computer screen whilst they are on-line and at random intervals a questionnaire is activated. Once this has been completed and closed they continue with their regular web activities (Chen, 2004). Participants may also be signalled via phones, handheld computers or watches (Snyder & Lopez, 2007). According to Finneran and Zhang (2002), there are few examples of qualitative research for studying flow and the Web. They suggest that deeper aspects of the flow model, within this context, may be uncovered if participants are able to express their experiences using their own words. This study aims to address this through applying a research methodology, IPA, which allows for the participants “voice” to be heard.

There is a disparity in how flow is measured in research. The three, four and eight channel models as previously discussed show flow to be determined by the congruence of challenge and skill. Substantial research has provided empirical validation that challenges and skills are primary conditions for flow demonstrating that when these are present the experience of flow is more likely to occur (Schmidt et al., 2007). Several limitations exist with this approach, as although high challenge and high skill are associated with the likelihood of flow being experienced, considerations of the other conditions identified in flow theory are not accounted for. Research by Schmidt et al. addresses this considering the full complement of affective and cognitive elements whilst considering external dimensions of the flow experience. Findings revealed noticeable variation in flow experiences both across and within participants and that the experience is accessible to individuals from a variety of backgrounds. The interactional nature of flow is also highlighted showing the importance of considering the interplay between the environment and the individual. Results suggest that both external and internal dimensions of experience exert an independent influence on flow. Novak, Hoffman and Duhachek (2007) found the flow experience to occur in both experiential and goal-directed activities in on-line flow experiences. They suggest that further investigation is required in how the antecedents they identify as skill, challenge, involvement, focused attention and telepresence differ in these processing modes.

Marr (2001) claims that although inferred mental states primarily explain flow and bio-behavioural processes, the neural, muscular-skeletal and somatic concomitants require investigation. He states that a satisfactory theory of flow explaining and integrating the neuro-psychological, cognitive and behavioural events that comprise flow experiences does not exist. He defines flow as “the subjective or felt aspect of a consistent and high level of neural activation or arousal” that creates a state of alertness that is pleasurable, rather than a distinctive or separate physiological or mental state (Marr, 2001, p. 7). Eby (2006) discusses research conducted on the neuro-physiological aspects of the phenomenon of flow, at the University of California, Irvine, using Positron Emission Tomography (PET scan technology). Findings show that when learning to master a video game there is reduction in the overall metabolism of the brain. There is less brain activity along with greater skill, indicating that increasing ability results in better efficiency and the brain relaxing into the task. Studies with high school students who reported flow more frequently showed they had

less cortical activity, were less aroused by tasks and spent less mental effort responding to test situations (Eby, 2006).

The reliability of flow indicators between studies is reportedly low (Finneran & Zhang, 2002) with a clear conceptual definition of the flow construct lacking (Hoffman & Novak, 2007; Weibel, Wissmath, Habegger, Steiner, & Groner, 2008). Wong (2006) suggests there is a need for further investigation and evaluation of the causal relationships of variables related to experiencing flow in HCI. He argues that the service quality of the information system in all applications is important as optimal flow experiences and the resulting positive outcomes are dependent on this. It is proposed that reliability and responsiveness, previously unaccounted for in research on flow, relate positively to flow which is perceived as a cumulative state of micro flow experiences (Wong, 2006).

Flow has been viewed as both a uni-dimensional construct with antecedents and consequences and as multi-dimensional with some of the identified antecedents and consequences incorporated directly into the flow construct (Hoffman & Novak, 2007). Inconsistent models persist with discrepancies about what constructs are significant and at what stages of the flow model they should be placed. An example is intrinsic interest, this could be an antecedent or prerequisite with doubt arising as to whether or not it should be included as part of the flow experience (Sanchez, Gallego, Soriay, & Aborg, 2008). The classification of perceived control is another as it could be an antecedent of flow, a construct in the state of flow or an outcome of flow (Wong, 2006). Hoffman and Novak (2007) summarized 20 articles presenting models of flow showing a key distinction among these being the set of antecedents and consequences of flow relating to online use.

It is interesting to note the inconsistency in the way flow is modelled in web based research. Due to the practical limitations this will not be discussed in depth as relevant areas have been highlighted in the review. Hoffman and Novak (2007) separated the studies into structural and conceptual models of flow. Table I presents the structural models they considered, with Table II showing conceptual models selected as relevant to this study.

Table I.

Summary of Structural Models of Flow

Authors	Antecedents	Flow	Consequences
Agarwal & Karahanna (2000)	Playfulness, personal innovativeness	High-order construct of “cognition absorption” (curiosity, control, temporal dissociation, focused immersion, heightened enjoyment)	Perceived usefulness, perceived ease-of-use, behavioural intention
Hsu & Lu (2003)	Perceived ease of use	Uni-dimensional flow	Attitude toward playing online game, intention to play online game
Huang (2003)	Complexity, interactivity, novelty	Multi-dimensional construct (control, attention, curiosity and interest)	Utilitarian and hedonic web performance
Novak, Hoffman, & Yung (2000)	Online tenure, skill, control, interactivity, challenge, arousal, importance, focused attention, telepresence, time distortion	Uni-dimensional flow	Exploratory behaviour (via telepresence)
Sanchez-Franco (2006)	Usefulness, ease of use	Higher-order construct (enjoyment and concentration)	Attitude, intention, usage
Skadberg & Kimmel(2004)	Ease of use, speed, attractiveness, interactivity, skill, challenge	Higher-order construct (time distortion, enjoyment)	Learning about a place, change in behaviour and attitude

Note: Adapted from “Flow Online: Lessons Learned and Future Prospects”, by D.L. Hoffman and T.Novak, 2007. Unpublished Manuscript, University of California.

Table II.

Summary of conceptual models of flow

Authors	Antecedents	Flow	Consequences
Finneran & Zhang (2003)	Artifact, person (trait, state), task	Multi-dimensional construct (dimensions not specified)	None specified
Pace (2003)	Curiosity, time urgency, goal, usability, skill, challenge, distractions, content interest, progress toward goal, attention focus	Multi-dimensional construct (joy of discovery and learning, reduced awareness of surroundings, time distortion, merging of action and awareness, sense of control, mental alertness, telepresence)	None specified
Shin (2006)	Skill, challenge, concentration, goal, gender	High-order construct (time distortion, enjoyment)	Achievement, satisfaction
Wozcynski, Roth, & Segars (2002)	Openness to experience, cognitive spontaneity, emotional stability, computer anxiety	Flow state (internal), playful behaviour (external)	User satisfaction, computer proficiency, personal innovativeness in IT

Note: Adapted from “Flow Online: Lessons Learned and Future Prospects”, by D.L. Hoffman and T. Novak, 2007. Unpublished Manuscript, University of California.

Finneran and Zhang (2005) suggest that flow is ill defined due to the numerous ways it is conceptualized, operationalized and measured. In their literature review they identify a challenge in flow studies being that the experience has a dynamic and holistic nature making it difficult to isolate and study. Perhaps it is due to this reason that few studies focus exclusively on the flow experience to build models about it, but rather use the flow concept when studying other related constructs, for example, playfulness, fun and engagement (Finneran & Zhang, 2005). Returning to the earlier work on flow by Csikszentmihalyi

(1975), Finneran and Zhang show how he writes about flow from the individual's perspective in a more descriptive than predictive way. They continue stating that though there is debate about which factors belong in each stage of flow, the following structure of the stages is generally agreed upon; flow antecedents, flow experience and flow consequences.

Research by Sanchez, Gallego, Soriay and Aborg (2008) attempts to operationalize and understand the flow experience. They present the term technoflow as a multi-dimensional structure, a short-term peak experience characterized by intrinsic interest, absorption and enjoyment in the HCI context. Intrinsic interest is selected rather than intrinsic motivation as it is perceived that interest is related to a very specific moment and activity whereas motivation is a general and wider concept.

Snyder and Lopez (2007) state that individuals with autotelic personality characteristics are likely to experience flow often and appear to experience less stress and have a preference for „high-action-opportunity, high-skills situations“ that are stimulating and encourage growth. Although the autotelic personality is an essential aspect of Csikszentmihalyi's model of flow, Finneran and Zhang (2005) express concern as to how few researchers include it in their models. They suggest that more studies are needed in the area of individual differences and the autotelic personality so as to assist researchers in clarifying which individual measures influence the experience of flow and where they occur in that process. Conceptually, they argue, a model of flow must consider both an individual's traits and state. As a person's state is dynamic, they perceive it will influence the opportunity of having a flow experience at a specific moment in time.

Weibel et al. (2008) note that preliminary research suggests that consistent with the dimensions of the flow experience as initially outlined by Csikszentmihalyi, is the psychological experience of computer gaming. Flow is proposed to be one of the sources of the attractiveness of online games with enjoyment and playfulness resulting when the difficulty of the game corresponds to the skills of the player (Jegers, 2007; Pilke, 2004; Voiskounsky et al. 2004). Qualitative research by Pace (2006) concludes that flow theory provides a plausible explanation for why and how immersion occurs during computer game play with findings consistent with the dimensions of flow as identified by Csikszentmihalyi (1975, 1990) and other researchers. According to Finneran and Zhang (2005, p. 98), studies

conducted in HCI indicate “the great promise that flow can yield in increased learning, improved attitudes, increased computer use, and overall, positive experiences within a computer-mediated environment”. In considering the aims of a study, it can be noted from the above discussion, that the researcher needs to be aware of whether their aim is to study the flow state, the factors contributing to the experience of flow or the outcomes of the experience or all of the mentioned aspects. This thesis is a study that seeks to explore if flow is experienced whilst gaming online and if so, the nature of the phenomenon within this context.

3.5. Chapter summary

The majority of studies of flow (over 100 identified in HCI from diverse fields) have occurred in North America and Asia with a call for research from other continents to be addressed, Africa included (Wong, 2006). A gap has been identified in that studies conducted on the phenomenon of flow in HCI, focus on the individual’s experience of flow and autotelic activities in this domain. Much research on flow, in different disciplines, has been grappling with the theoretical and conceptual issues as presented in this chapter. It has emerged in the process of compiling this literature review, that there has been little investigation in Csikszentmihalyi’s early theory of autotelic relationships applied to on-line gaming.

Considering the significance of increasing our understanding of relationships in this field we cannot undermine the relevance of research pertaining to such issues. This chapter has drawn to our attention the impact our relationships have on the quality of our lives, our personal development and that of our society. Csikszentmihalyi (1990) reminds us that as flow activities and relationships are chosen freely and are intimately related to the source of what is ultimately meaningful, they are possibly more precise indicators of who we really are. Technology and online gaming may enable us to experience flow through a medium that is dynamic, evolving and interactive and is worthy of investigation from a multidisciplinary approach. Flow as experienced in the online virtual playground may give us hints and clues about the future of technological, social and individual developments.

CHAPTER FOUR

METHODOLOGY

4.1. Introduction

This chapter will present the reader with a comprehensive account of the methodology of this research study. It begins with a clear statement of the purposes of conducting this research and continues to discuss the appropriate research framework and design. Interpretative Phenomenological Analysis (IPA), within the qualitative paradigm and appropriate to use in the emerging field of positive psychology, was chosen. Together these can be understood to form the research framework. The chapter then continues to present the philosophical underpinnings of IPA teasing out the ontological assumptions and epistemological implications of these positions. The design of the research is discussed, explaining the thorough process of conducting IPA research. Aspects of the research design include; sampling, data collection, data analysis and levels of interpretation for doing IPA, and importantly ethical considerations as well as the „reliability“ and „validity“ of the design.

4.2. Research Aims

The purpose of this research is twofold. Firstly, it aims to understand the experiences of online gamers in order to gain a rich and detailed description of this. By considering the themes that emerge the research will investigate i) whether or not flow is experienced by the participants whilst gaming online, and, if present, ii) the nature of the phenomenon within this context. The second purpose is to contribute to the process of theory building which involves integrating the participants“ narratives into existing theories on flow and online gaming.

4.3. Ideological orientation: Qualitative research

According to Zayed (2008), the subject matter or phenomenon under study determines the methodology one uses in psychological research. Lavery (2003), drawing on support from van Manen (1997) and Madison (1988), outlines the notion of methodology saying that it is not a correct method that is required, but rather a creative approach with reasonable principles, good judgment and openness to experience. Zayed states that historical and sociocultural factors, which deeply impact on the individual, must be considered in the choice of method when studying human phenomena. Decisions by the researcher should

reflect the theoretical framework of the methodology used, be based on reason, and be made explicit to others (Whitehead, 2004). As discussed in the literature review of this thesis, society, in contemporary times, has become increasingly divided, multifaceted and complex, as well as there being an increase in social groups and multiple social selves. Considering these factors, a qualitative method as opposed to a quantitative method has been chosen to explore and capture the meaning structures of the phenomena being researched.

Qualitative research is “concerned with the quality or nature of human experiences and what these phenomena mean to individuals” (Draper, 2004, p. 642). Such a design strategy attempts to be flexible, non-controlling and non-manipulative, utilizing purposeful sampling. The aim is to gain insight about the phenomenon, as opposed to an empirical quantitative generalization from a sample to a population (Patton, 2002). Qualitative researchers are engaged with the interpretation and description of human behaviour, aspiring to generate understanding of the complexity of how individuals experience themselves and the world in context. This process of discovery requires of us as researchers to treat the participants in our study as experts on their own lives, taking into consideration that the meanings we give to human action are socially constructed and thus contingent on social context (Draper, 2004). Parker (2005, p. 9) elaborates on this, encouraging us to be mindful of two things; that the research attends “to the context in which the knowledge is produced, and the relationship between the researcher and researched”. This is supported by Vis (2008) who considers the relationship between the participant and researcher as a unique interaction that involves the practice of interpretation to create understanding.

The goal of the qualitative approach in research is to present a detailed and „thick description“ (Geertz, 1973) of the phenomena studied. This is created by drawing on psychological theory to generate understanding and explanation, whilst depicting and describing the phenomena within its particular social context and acknowledging the meanings attributed to it. Willig and Stainton Rogers (2008, p. 9) capture this:

The challenge to qualitative researchers is, therefore, to go beyond what presents itself, to reveal dimensions of a phenomenon which are concealed or hidden, whilst at the same time taking care not to impose meaning upon the phenomenon, not to squeeze it into pre-conceived categories or theoretical formulations, not to reduce it to an underlying cause.

Whitehead (2004) explains that reflection is required as the research process is influenced by the horizon and prejudices of the researcher. Outlining Gadamer's (1976) position, which is presented in depth later in this section, she explains how understandings and interpretations are historically and culturally influenced and cannot be eliminated. It is these prejudices or pre-understandings which enable us to interpret and make sense of events and people.

According to Mauthner and Doucet (2003), the perspectival, provisional and partial nature of knowledge claims and the production of theory has been demystified with the „reflexive turn“ in the social sciences. They suggest that reflexivity is not confined to emotional responses, social location, theoretical perspective and the need to record and document the research process. Institutional and interpersonal contexts of research as well as ontological and epistemological assumptions are also thought to deeply influence the process and outcomes of the research. According to Parker (2005, p. 30), “the position of the researcher is the structurally-constituted research subjectivity that has enabled some things to happen in the research and perhaps closed down other things”. Reflexivity demands transparency in procedures during the entire research process. It is a means for inspecting and critically evaluating the study with clarity, not only to others but to ourselves as well.

Qualitative research offers a number of theoretical orientations. Draper (2004), as well as Lincoln and Guba (1985), explains how questions of ontology, epistemology and methodology are essential in conducting and critiquing research. Draper, as well as Mauthner and Doucet (2003), describe how different traditions and their positions on these issues range from expansive philosophical postulates concerning the form and nature of reality and what can be known about it (ontology), how it comes to be known and the nature of the relationship between this and the knower (epistemology), to narrower theoretical or ideological concerns and how the inquirer can go about finding out whatever they believe can be known (methodology). The approach and position adopted by the researcher will be reflected in the framing of the research question as well as the methods used for data collection, analysis and interpretation. Examples of contemporary theoretical frameworks include but are not limited to: Phenomenology, ethnography, grounded theory, social constructionism, feminism, post-modernism, critical realism and hermeneutic phenomenology (Draper, 2004; Laverly, 2003).

Returning to the specific area of interest in this thesis, it can be established that qualitative methodology is well suited to the research. The concern is for a qualitative and psychological understanding of what constitutes a meaningful gaming experience. Qualitative methodology offers the opportunity to focus on the lived experience of the participants, the gamers, and to explore their perceptions and the meanings they assign to gaming and the social relationships they experience in the virtual playground. Coupling this with a subjective and reflective process of interpretation, the researcher has the opportunity to explicitly enter the research process to explore how the participant's make sense of their experiences and to illuminate this in a way that speaks back to the research question. Sansom (2005) captures this in explaining that critical tensions are required to be allowed to exist between meaningful claims and their culturally constructed nature. He explains that it is from this position that a richer understanding upholding the interaction and diversity between different kinds of meaning can be discovered, experienced and known. This includes meaning that is unconscious and conscious, hidden and surface, figurative and literal, as well as, indirect and obvious. Centring on the exploration of the experiences and meanings gamers have whilst gaming, a qualitative method recently developed called interpretative phenomenological analysis is appropriate to use in this research project. It has been used in social, health, clinical and applied psychology (Chapman & Smith, 2002; Reid, Flowers, & Larkin, 2005; Sansom, 2005).

4.3.1. Interpretative phenomenological analysis (IPA) applied to research in the virtual playground

IPA is an approach that is in keeping with the broad premise of positive psychology as it allows for the participants to express their experiences about well-being, strength and quality of life (Reid, Flowers, & Larkin, 2005). It is thus suitable for exploring the psychological aspects of the experience of flow and on-line social relationships for gamers. Many of the issues to be explored are dilemmatic, dynamic as well as complex and IPA, as we shall see further in this discussion, allows the possibility of engaging with such issues. Although the researcher knows of no previous studies using IPA to explore the experience of gaming or flow in the virtual playground, it is said by Chapman and Smith (2002, p. 127) that due to its flexible and detailed methodology, it is "useful in a domain where the issues are relatively novel and where they raise potentially sensitive and affective responses from participants". According to Smith and Osborn (2007, p. 55), the approach of IPA is suitable when the

researcher is exploring how individuals “perceive the particular situations they are facing” (in this research project it would be the gamers perceptions of their experience of gaming online) and how they are making sense of their social and personal world (this would arise in both the gamers’ „real“ and „virtual“ personal and social world).

Eatough and Smith (2008) suggest that from published IPA studies, patterns have emerged within these studies that reflect a focus on participants’ interpretation and meaning making, a concern with sense of self and identity, and an attention within lived experience to bodily feeling. They continue to state that IPA’s detailed analysis of lived experience enable the effects on the sense of self, of significant topics and events, to come to the fore.

Sansom (2005) explains that the construction of social reality through the role of language is acknowledged in IPA. According to Smith and Osborn (2007) the individual is perceived as a physical, affective, linguistic and cognitive being. They propose that IPA assumes a complicated chain of connection to exist between a person’s emotional state and their thinking and talk. Recognizing that self-disclosure is often difficult, it is for the researcher to interpret the emotional and mental state from what is expressed. Chapman and Smith (2002, p. 126) capture this stating that IPA engages with the meaning that events, actions and experiences hold for participants whilst recognizing that, in order to make sense of this, the researcher’s own conceptions are required which occurs through a process of interpretative activity. The researcher is active in the dynamic process of research and aims to “stand in the shoes of the participant” (Shaw, 2009, p. 4). A double hermeneutic is involved as: “The participants are trying to make sense of their world and the researcher is trying to make sense of the participants trying to make sense of their world” (Smith & Osborn, 2007, p. 53).

Theoretical touchstones for IPA are phenomenology, hermeneutics, symbolic interactionism and post-structuralist thought (Sansom, 2005; Smith & Osborn, 2007). To maintain transparency in this research project it is necessary at this stage to briefly consider the ontological and epistemological positions of these approaches as they theoretically underpin the method of analysis applied in IPA. Thereafter, a detailed account will be given of the application of IPA in the design of this study and the research process of data collection, analysis and interpretation.

4.3.2. Phenomenology: Husserl and the roots of phenomenology

Phenomenology originated from the ideas of human understanding and the attempt to construct a philosophical science of consciousness by Edmund Husserl (1859-1938) (Fade, 2004). Husserl presented phenomenology as a new method to scientifically describe lived experiences (Vis, 2008). His method is often referred to as Transcendental Phenomenology which is an attempt to comprehend, understand and “unfold meanings as they are lived in everyday experience” (Lavery, 2003, ¶ 6). Consciousness is defined as an intentional act of revealing fundamental to our human nature (Zayed, 2008). Husserl argued that the phenomenon we study should be allowed to “speak for itself” and we should let it manifest or reveal itself in consciousness.

A key concept for Husserl is the life-world or *Lebenswelt* which Lavery (2003) explains as being comprised of our experience of body, self, relationships and the world of objects as we perceive them around us, including things that are common sense or taken for granted. The body is central to the notion of „interweaving“ or, for Husserl, *Verflechtung* (Eatough & Smith, 2008). This means that how we experience our body and the way it unfolds is particular to ourselves and differs from the world disclosed through the body of another. Returning briefly to IPA, Husserl’s influence can be noted as its starting point is in the intersubjective and unique experiences of the individual with attention in the analysis drawn to the “lived existential body and how it communicates felt meaning to others” (Eatough & Smith, 2008, p. 186).

The significance of tools, objects, the flow of time and the meanings of our experience of events all arise in our life-world (Finlay, 2008; Lavery, 2003, Smith, 2009). According to Finlay, this life world is a day-to-day world of complex meanings forming the backdrop of our everyday interactions and actions. Attention is drawn not to the world of introspection but rather the individual’s social world and lived situation.

Smith (2009) expands on this, giving examples of what phenomenology studies, this includes but is not limited to; imagination, perception, emotion, memory, attention, self-consciousness, embodied action, intention or purpose in action, awareness of others, social and collective interaction as well as linguistic and cultural activity. According to Husserlian phenomenology, the structure of these forms of experience involves intentionality and the

study of the phenomena as they appeared through consciousness. Intentionality is defined by Boedeker (as cited in Dreyfus & Wrathall, 2005, p. 157) as “that feature of consciousness that it is about, or directed toward some object, whether or not it really exists”. The phenomenological approach he discusses is for Husserl, the „noema“, „sense“, or „intended-as-such“ of what we think, as opposed to what we think about. Zayed (2008) elaborates saying that human beings, who are self-interpreting, have an intentional relationship with their world. Their actions are meaningfully interrelated and “bound up with beings-for-whom they are meaningful” (p. 556).

It is the aim of phenomenology then, to understand the signifiers, meanings and human experience, as opposed to natural science’s approach at explaining its existence. Access to the structures of consciousness is gained as a result of an intentional process and direct „grasping of the phenomena“ (Taylor, 2003). Husserl proposed that through conscious awareness and the intentional direction of one’s focus, one could directly confront the ultimate structures of consciousness and develop a description of these particular realities (Lavery, 2003). According to Finlay (2008), phenomenological research provides a rich textured description of this lived experience as it appears to us in our consciousness or through experience. Our focus, she states, is on the intentional relationship between the individual and the meanings of the things they are experiencing and focusing on.

Transcendental phenomenology was Husserl’s “attempt to control the researcher’s subjectivity by placing it as a given reality” (Vis, 2008, ¶ 6). This process is described as phenomenological reduction or bracketing. Vis explains the method as requiring the researcher to contemplate how the context of their life would affect and influence what they see, interpret and describe when researching a phenomena. In order to see a phenomenon clearly, one’s judgments, understandings and previous assumptions need to be suspended and particular beliefs about the phenomena bracketed. A „suspension of belief“ by the researcher was required (Finlay, 2008; Lavery, 2003; Vis, 2008, Zayed, 2008). From what has been discussed, Husserl can be seen to acknowledge that interpretation exists, but minimized its complexity and assumed it could be defined and controlled.

4.3.3. Heidegger branches out: Hermeneutic phenomenology

Hermeneutic phenomenology was developed by Heidegger who was inspired by Husserl but “argued that the phenomenological method was basically interpretative” (Giorgi & Giorgi, 2008, p. 167). Both scholars agreed that the process of interpretation of a phenomena was part of being in the world and understanding this being (Vis, 2008). A primary difference between them, however, is presented by Giorgi and Giorgi who state that although both agree to interpretation and description as legitimate methods, for Husserl, from an epistemological perspective, “description is primary with interpretation being a special type of description”, whereas for Heidegger, from an ontological perspective, “interpretation is actually primary and description is a special type of interpretation” (p. 167). In exploring the complexity of interpretation, Heidegger included language as a challenge used to describe our understanding of being. He also brought the influence of historical and shared experiences as influencing our interpretations to the fore, noting that understanding is linguistic and not free from the previous influences of others (Vis, 2008). Sluga reminds us that for Heidegger, “how we read, interpret, and translate something will therefore always depend on who we ourselves are and on what shore we stand on or whether we have any shore to stand on” (2005, p. 118). Heidegger also questioned whether the „meaning of beingness“ could or should be captured by Husserlian transcendental phenomenology.

Dasein, or *being*, was introduced by Heidegger to refer fundamentally to how we make sense of our world and ourselves or, put differently, the mode of being human (Conroy, 2003; Lavery, 2003). He emphasized this rather than consciousness. “*Dasein* is the place where the question of being arises, and its task is to interpret the meaning of being” (Giorgi & Giorgi, 2008, p. 167). Lavery explains that consciousness is, according to Heidegger’s view, not separate from the world but a formation of historically lived experience. The way we are, is what understanding can be perceived to be. According to Crowell (2005, p. 55), Heidegger held that “intentional content cannot be understood as a function of consciousness alone but must be seen as deriving from the structure of being-in-the-world as a whole, that which enables our understanding of being”. It is through this understanding, which includes an individual’s background, history and culture, that one determines what is „real“. Meaning is found through the transaction between the person and the word.

For Heidegger, we and our activities are always “in the world”, our being is *being-in-the-world*, so we do not study our activities by bracketing the world, rather we interpret our activities and the meanings things have for us by looking to our contextual relations to things in the world (Smith, 2009, ¶ 45).

Sheehan (2008) suggests that Heidegger’s phenomenology differs from Husserl’s in what constitutes the meaningfulness of meaning. For Husserl it was transcendental subjectivity which was the source of all meaning-giving, whereas for Heidegger it was the world or lived context within which things are encountered that is the source of meaning. This was Heidegger’s major shift away from Husserlian phenomenology to his own hermeneutical phenomenology.

According to Dreyfus (n.d.), Heidegger proposed that our nature is to be „world disclosers“. As human beings, we open distinct worlds or contexts in which we think, perceive and act by means of our coordinated practices and equipment. Selves, people and things are able to appear and our ways of acting make sense in a pervasive and distinct way in these worlds. In Heidegger’s view, the final epoch that we are entering is the technological understanding of being (which has been discussed in the literature review of this thesis).

Being-in-the-world can be understood as a holistic and specific form of existence which can be authentic, inauthentic or undifferentiated, yet always emerges in an interdependence and reciprocity with other beings. Our situation is revealed in a context of being-with-others and equipment. Conroy (2003) defines Heidegger’s three modes of existing in more depth. An authentic mode of existence reflects a synergy between what one says and does, individuality is achieved and one is an engaged agent with life as a coherent story reflecting integrity and cohesiveness. Inauthentic modes of existence have a sharp distinction and discord between what one says and does. There is an active identification with social roles and life is experienced as a sequence of calculated strategies with no over-riding purpose. An undifferentiated mode of existence is passive, unreflective and conforms to socialized and cultural „ways of doing“. Being is said to exist in the drifting, undifferentiated, indifferent mode most of the time. Carman (as cited in Dreyfus & Wrathall, 2005, p. 286), explains modal indifference as neither good, nor bad, but as average everydayness “out of which *dasein* must emerge as intelligible to itself at all, in any particular way” and that this is,

according to Heidegger, “the thematic starting point of a hermeneutic phenomenology of human existence”.

Considering what has thus far been presented, the reciprocal interdependence between self, others, and objects, is the world we exist in. Situated in the „background“ we find a place where our discriminations, practices and everyday coping skills show up, coming into our awareness as the need arises. Conroy (2003, p. 7) states:

We exist amid a world of shared meanings and understandings in the social context as a mode of being human which exists factically. Facticity refers to the idea that we are able to understand ourselves as bound up in our own as well as others“ destiny. We dwell alongside other persons. A person is never settled in the world, never clear about the world in which one finds oneself.

Heidegger claims that it is through our moods that the world as a whole matters to us in a certain way. They reveal our facticity and at the same time tell us something about ourselves. Linking this to IPA, Eatough and Smith (2008), state that it explicitly attends to a hermeneutics of factual life. An example by Crowell (2005, p. 58) relating to this thesis, explains how when we experience boredom, “it is the world as a whole that is boring, hence individual things in it can strike me as tedious” and when we are joyous we are “warmly attuned to things as a whole”, and thus able to find particular things pleasing.

Interpretation, from this discussion, can be perceived as an interactive act with individuals not existing as separate entities, but rather as forming part of an integral part of a communal world. Our interpretation and understanding of the world and ourselves is therefore synergistic and co-constituted. Merleau-Ponty captures this idea saying: “Man is in the world, and only in the world does he know himself” (cited in Willig & Stainton-Rogers, 2008, p. 180). A central feature of the hermeneutic notion of world is that it is linguistically articulated and thus intersubjectively shared, as *dasein* shares a natural language so it can share the same world with others (Lafont, 2005).

Hermeneutics for Heidegger can be seen as not simply a method, but the very nature of being-in-the-world. The knowledge we have, although constrained by cultural context and complicated by the individual being self interpreting, mediates our understanding of an object or event. This is described by Eatough and Smith (2008, p. 180): “Our relationship

with the world is a hermeneutic one which operates within a hermeneutic circle”. In the context of research, Lavery (2003, ¶ 16) explains that the “interpretative process is achieved through a hermeneutic circle which moves from the parts of experience, to the whole of experience and back and forth again and again to increase depth of engagement with and the understanding of texts”. Conroy (2003) expands on this stating that this form of interpretation is circular and shared between persons in their interactions. In order to situate the meanings derived in analysis, a prolonged period of reflection is required on both parts of the data and the whole (Whitehead, 2004). According to Kvale (1996), the end of this spiralling through a hermeneutic circle occurs when a place free of inner contradictions and one of sensible meaning for the moment, has been reached.

4.3.4. Gadamer and the fruits of Hermeneutic phenomenology

Gadamer continued work on Heidegger’s concepts of history and language. He argued that “what we experience as human beings depends on our history as well as our present; and that the language that is chosen to describe the experience is just as significant as the experience itself (Vis, 2008, ¶ 14). A new level of understanding and interpretation is created through conversation, the combined present and past experience, the use of language and the language used to share and communicate our experience to others.

For Gadamer, pre-judgment or prejudice is significant in that it is only through our past that we can come to interpret and understand the world. This starting point is referred to as a horizon which Gadamer viewed as the beginning of our actions and thoughts. Whitehead (2004) explains that these horizons or prejudices are historically and culturally produced understandings influencing interpretation, and, thereby, constitute understanding. “Understanding between persons is possible only to the degree that people can initiate a conversation between them and bring about a “fusion” of their different horizons into a new understanding, which they then hold in common” (Smith as cited in Vis, 2008, ¶ 16). The willingness to engage in this dialogical journey is important for the researcher as it creates meaning as opposed to simply reporting it.

Awareness and reflection in the research process is clearly critical. Over time the researchers’ horizon will also evolve, changing the interpretation of a text and as such, research is a temporal investigation. Mauthner and Doucet (2003, p. 416) remind us that:

“The production of theory is described as a social activity, which is culturally, socially and historically embedded, thus resulting in „situated knowledge”. This brings us the third theoretical touchstone for IPA, symbolic interactionism.

4.3.5. Symbolic Interactionism

A significant theoretical perspective in sociology, which has its roots in Weber and Meads’ theories, is symbolic interactionism. McClelland (2000) states that both Weber and Mead emphasized pragmatism, the subjective meaning of human behaviour and the social process. It was Blumer, however, who coined the term and formulated the theory. According to Garson (2006), symbolic interactionism is associated with phenomenology and postmodernism as behaviour is interpreted as a „product of community life” with all meanings being intersubjective. He continues to elaborate that methodologically what this implies is that meaning and theory cannot be imposed by the researcher but must emerge from community experience.

McClelland (2000) presents a detailed outline of the interactionist approach. He explains that for interactionism, individuals continually adjust their behaviour to the actions of other actors and are thus perceived as pragmatic actors. This process can happen due to our interpretations of the others’ actions and those who perform them, as well as ourselves, as symbolic objects. Our ability to imaginatively rehearse, think and react to both the other and our own selves and actions as symbolic objects positions us as creative, active participants constructing our social worlds.

The core principles of Blumer’s theory are meaning, thought and language. Meaning is central in human behaviour, as we act towards others and things based upon the meanings we have given to those things or people (Nelson, 1998). Meaning is, for the social interactionist, believed to arise out of the interaction between people as opposed to the assertion that it is already established in an individual’s psychological make-up. Garson (2006, ¶ 2) reiterates this saying “individuals and groups interact based on meanings drawn from prevailing symbols” which are redefined, vary and evolve through human interaction. Symbols associated with an agency will vary over time and by group with the meanings emerging from community experience. The definition of the situation, the negotiation, as well as the continual readjusting of social processes among members of a society, therefore, “creates

temporary, socially constructed relations which remain in constant flux, despite relative stability in the basic framework governing those relations” (McClelland, 2000, ¶ 3). Negotiated order within a context is defined by symbols arising from human interactions and these are expressed in norms, rules and expectations. Garson suggests that individual behaviour will correlate more with community definition of meaning than with material or economic motivations. He states that the control exercised by a community, be it informal, semi-formal or official, will be greater if it defines the meaning of symbols for an individual.

It is through language, the second core principle, that meaning is negotiated through symbols. According to Nelson (1998, ¶ 5), “it is by engaging in speech acts with others, symbolic interaction, that humans come to identify meaning, or naming, and develop discourse”. Based on language, thought, the third core principle modifies an individual’s interpretation of symbols and allows one to imagine different points of view. This requires role-taking. McClelland (2000) suggests that role-taking allows us to take the other’s perspective and is a key mechanism of interaction. We are able to understand how our actions may impact on the other and what the meaning of our actions might imply to those with whom we interact. He states that improvisation is required of us as all situations and roles are ambiguous with human social behaviour being poorly scripted. It is necessary then for us to “create the roles and situations to some extent before we can act” (¶ 4). The concept of the self in symbolic interactionism is framed by the above principles.

People use „the looking-glass self”: they take the role of the other, imagining how we look to another person. The self is a function of language, without talk there would be no self-concept. People are part of a community, where our generalized other is the sum total of responses and expectations that we pick up from the people around us. We naturally give more weight to the views of significant others (The University of Twente: Symbolic Interactionism, 2009, ¶ 6).

Smith and Osborn (2007) acknowledge the influence of symbolic interactionism on IPA and its concern with how people construct meanings within both a personal and social world through a process of interpretation and social engagement. IPA agrees on the significance of language and that “our sense of self (at least in part) emerges from the never ending flow of intersubjective communication” (Eatough & Smith, 2008, p. 184).

4.3.6. Social constructionism, discursive, cognitive and narrative psychology: Similarities and differences with IPA

The claim by social constructionism that historical and sociocultural processes are significant to how we understand and experience our lives as well as to how we relate our experiences is endorsed by IPA (Eatough & Smith, 2008). IPA proposes however, that the “lived life with its many vicissitudes is much more than historically situated linguistic interactions between people” (p. 184). Eatough and Smith suggest that in IPA it is accepted that when people relate narratives of their lives, their personal accounts also include human development and potential which connects the past, present and future thereby *making* their lives „imaginative enterprises“. They suggest that the rich, psychologically forceful and private, often indefinable aspects of emotional life are missing in discursive psychology and that IPA attends to these issues.

The significance of language and qualitative analysis is common ground between IPA and Discourse Analysis. According to Chapman and Smith (2002), the contrast between them is that IPA is concerned with understanding what the participant believes or thinks about the phenomena being researched, whereas, discourse analysis is sceptical of linking verbal reports onto underlying cognitions. Links with Foucauldian discourse analysis is acknowledged in IPA. The shared concern relevant here is with how a particular discursive construction is implicated, experienced and lived by an individual (Eatough & Smith, 2008, p. 185).

In IPA cognition is a central analytic concern as the attempt is to unravel the relationship between cognition, account and behaviour (Shaw, 2009). McCormack (2008) presents Smith’s account of “hot” cognitions as opposed to “cool” cognitions as being the essence of good IPA research. „Hot“ cognitions” are described by Eatough and Smith (2008, p. 186) as issues in a persons” life which are emotive, dilemmatic or burning. McCormack expands saying, “there is no sense of closure related to the individuals” ability to engage with their experiences” (p. 29). In the context of research, the engagement and reflection with events, although experienced in the past, is a present lived experience in the interview process. It is not detached but emotionally laden with the researcher witnessing the drama as it plays out. “Cool cognition”, on the other hand, refers to “longer term reflection across the life course” (Eatough & Smith, 2008, p. 186).

Instead of being highly constructionist, an epistemological commitment to the individual is noted in IPA (McCormack, 2008). The link between IPA and cognitive psychology is the shared concern with mental processes and IPA gives cognition a “phenomenological slant believing it to be one aspect of being-in-the-world” (Eatough & Smith, 2008, p. 186). The emphasis of IPA on sense-making by both the researcher and participant is suggested by Smith and Osborn (2007), to show a theoretical alliance with the cognitive paradigm in psychology, however, they note that these approaches diverge in the best way to study and conduct research when examining how people think.

According to Eatough and Smith (2008), there is an affinity between IPA and the different forms of narrative analysis. Both share an acknowledgement of the significance of interpretation and a primary concern with how the world is experienced. They consider Bruner’s narrative approach, which is that we should “not only be concerned with how a narrative is constructed but we should attend to how it operates as an instrument of mind in the construction of reality”, as significant to IPA (p. 185).

Having presented a brief overview, it is possible to see how the above theories have formed the grounding for IPA and are well suited as a theoretical backdrop for a qualitative research project. A detailed presentation of the application of this method of analysis will now be discussed.

4.4. Interpretative phenomenological analysis: The method

IPA has been discussed earlier as a dynamic research process allowing the possibility, through interpretation, to engage with the lived experience of the participant. According to McCormack (2008, p. 30) it offers the opportunity to reflect on the impact our disciplined backgrounds and pre-conceptions bring to research as individuals “while facilitating analysis of subjective lived experiences from a robust philosophical position”.

IPA is inductive and idiographic, favouring open-ended questions with a primary concern with exploring, in detail, a participant’s view of a subject and how they make sense of and bring meaning to those experiences in the present (Fade, 2004; McCormack, 2008; Reid, Flowers, & Larkin, 2005; Shaw, 2009; Snelgrove & Lossi, 2009). Mayes (2006) explains that as IPA is inductive, the details of the project cannot be specified before analysis, only an area

for investigation and locating a sample can be decided upon. As Smith and Osborn (2007, p. 55) state, “there is no attempt to test a predetermined hypothesis”. Although IPA does not follow any formulas or have any strict steps to adhere to, it is committed to prioritizing rich, idiographic accounts that are driven by a „bottom-up“ approach emphasizing the participant’s voice (Snelgrove & Lossi, 2009).

There are two approaches to IPA. These are described by Fade (2004) as being, firstly, the ideographic case study approach, suitable for small samples of up to ten respondents, with the aim to explore themes between cases or to present a single case. Smith and Osborn (2007) explain that an idiographic study allows for specific statements to be made about the participants, allowing for connections to be made between different aspects of their accounts. According to Eatough and Smith (2008, p. 183), this method explicitly addresses the interpersonal and subjective “involvedness of human emotion, thought and action, and the messy and chaotic aspects of human life, in the hope of getting a better understanding of the phenomena under investigation”. A participants’ “ways-of-being-in-the-world is portrayed in a case study. Mayes (2006, p. 7) states that if “a single case can throw light on a phenomenon then it represents a significant research finding”.

The second approach is that of theory building. Larger sample sizes are used for this approach to explore relationships and patterns between and within conceptual groups. According to Fade (2004), this approach is useful when a model or theoretical explanation is the desired outcome of the research. This is elaborated on by Smith and Osborn (2007, p. 56) who state that “readers make links between the findings of an IPA study, their personal and professional experience, and the claims in the extant literature. The power of the IPA study is judged by the light it sheds within the broader context”. Reid, Flowers and Larkin (2005), reinforce this stating that IPA is well suited for researching an „unexplored territory“ and area where theoretical pretext may be lacking.

4.4.1. Sampling: Who is included and why

In an IPA study the participants are recruited because of their experience of, and expertise in, the phenomenon being explored. Their position offers the researcher an understanding of their feelings, thoughts and commitments though telling, in their own words, and in as much detail as possible, their own stories (Reid, Flowers, & Larkin, 2005). Smith and Osborn

(2007, p. 56) remind the researcher to be pragmatic as “one’s sample will in part be defined by who is prepared to be included in it!”

Considering the size of a sample, Smith and Osborn (2007, p. 56) state that this depends on the following factors; “the degree of commitment to the case study level of analysis and reporting, the richness of the individual cases, and the constraints one is operating under”. They discuss the recent trend for IPA studies to use a small number of participants and argue for the advantages of the single case study (Reid, Flowers, & Larkin, 2005). This is reinforced by Eatough and Smith (2008) who mention that they have great interest in the facilitation of hermeneutic analysis in the case study and hope to see more of this work occurring in the future of IPA. Due to the commitment of IPA researchers to a detailed interpretative account of the cases, Smith and Osborn acknowledge that realistically this can only be done on a very small sample. They suggest that for students doing an IPA study for the first time, to produce a sufficiently penetrating analysis, three participants is a useful number for the sample. This allows the researcher to consider three elements at a time. IPA relates this approach to Kelly’s suggestion that in facilitating an individual’s personal constructs, the researcher can focus “closely on the relationship between the elements in considering a way in which two were similar to and different from the third” (p. 57).

Purposive sampling is favoured by IPA with participants in the study forming a homogenous group with reference to the research questions (Mayes, 2006). In this study three participants are university students and one is in-between jobs, all are experienced gamers, gaming regularly online. In line with IPA, the requirement for inclusion in the study was that the participants are „living“ the key issue, that is gaming online, and that they have the required expertise to talk about it in detail. All participants have been gaming online for a significant number of years and had experience that they could relate and converse about. I contacted the chairperson of the university gaming society via e-mail to discuss the possibility of members being suitable as participants. A meeting was held and as the chairperson met the inclusion criteria of the project, he was invited to partake in the research, which he did. Snowball sampling occurred as other potential participants were contacted through references and contacts at the university. The second participant was introduced to me by a colleague as he was known to game regularly. He was contacted via sms and invited to be involved in the research which he agreed to, and in turn suggested the third participant who was a fellow

gamer and with whom he often played online with. Contact was made with this gamer also via sms and he volunteered to participate in the study. The fourth participant was also introduced to me by a colleague as he resided with this gamer. She was contacted telephonically and invited to participate in the project, which she was happy to do.

4.4.2. Data collection and IPA: Semi-structured interviewing

IPA researchers can obtain data suitable for analysis using personal accounts, diaries or through focus groups; however, the most frequently employed method of data collection is the semi-structured interview which is a flexible data collection instrument (Chapman & Smith, 2002; Mayes, 2006; Smith & Osborn, 2007). The advantages of this includes the facilitation of rapport with the participant; novel, interesting areas and issues that arise can be probed and explored; the participants concerns and interests can be followed as questions are guided rather than strictly followed in the interview; and it tends to produce rich data for analysis (Smith & Osborn, 2007). According to Kvale (1996, p. 70):

The qualitative interview is a uniquely sensitive and powerful method for capturing the experiences and lived meanings of the subjects' everyday world. Interviews allow the subjects to convey to others their situation from their own perspective and in their own words.

An interview schedule is constructed prior to the interview and is a valuable means of considering what might be encountered in the interview process (Chapman & Smith, 2002). Smith and Osborn (2007) expand on this stating that if the researcher has thought beforehand about the different ways the interview may proceed, when it comes to the interview itself, she is then able to concentrate more confidently and thoroughly on what is actually said by the participant. Mayes (2006, p. 7), explains that the set of questions used in the interview schedule "acts as a starting point for a deeper dialogue about meaning". Chapman and Smith (2002) indicate that, in practice, it may happen that the interview diverges a lot from what was originally envisaged. According to Eatough and Smith (2008, p. 188), although there is structure in IPA interviews in the form of the interview schedule, in practice it becomes unstructured "as researchers emphasize the participants as storytellers rather than respondents". The aim of the semi-structured interview is thus to encourage the participant to engage in self-reflection and for personally significant and subjective aspects of the event to be disclosed (Sansom, 2005).

In constructing a semi-structured interview schedule (Appendix IV) I followed the guidelines offered by Smith and Osborn (2007). These included:

1. Determining the overall area to be discussed and the range of issues needing to be covered: As the area of my investigation is broad I decided to focus on three main topics based on my review of the literature. These being, motivation, identity and social relationships whilst gaming online. They were chosen as I felt they would elicit rich discourse that would speak back to my research aims and particular area of interest.
2. Appropriately sequencing the topics to be discussed: In considering the most logical order to follow in addressing these topics, I decided to start the interview with what gaming meant to the participant as I felt this was the best way into the interview and would enable them to begin to relax and become more comfortable speaking to me. The more sensitive and personal questions I introduced at a later stage when rapport had been established.
3. Constructing appropriate questions relating to each topic in order to address the issues being explored: After several drafts and conducting a pilot interview, my schedule started with general questions which then funnelled into more specific questions. This enabled the participants to give their own views on issues before discussing more specific questions which were of particular concern to me. I avoided using jargon and designed the questions to be neutral and open to avoid closing down the participants' response.
4. Constructing probes and prompts to encourage the participant to share in more depth their personal and social life-world. I included prompts for each question to assist me should the questions seem vague for the participant or if they had difficulty in responding due to the complexity of the issue raised. They are also useful to encourage the participant to elaborate on issues and become more engaged in the interview process.

As data collection in IPA is dialogical, interesting and novel areas are pursued and explored during the interview. According to Eatough and Smith (2008, p. 189), "constructing a clear interview schedule is important as it offers the interviewer mental maps – virtual ways to navigate through an interview". IPA interviews are required to be participant driven and this

together with the inductive nature of open-ended questions allows for the unexpected and unanticipated to emerge. At the heart of IPA, they state, lies the difficult skill to be able to move away from the schedule and to “follow the participant as he/she moves deeper into their personal experience”.

Smith and Osborn (2007) highlight that semi-structured interviews can become involved and intense and it is necessary to do them with as little interruption as possible. Two of the interviews I facilitated took place at the university psychology department, the other two at participants’ homes. The venue was chosen by the participants and an hour to an hour and a half was the time allocated for the interview. All participants were telephoned the day before to confirm that they were still able to participate in the interview.

At the beginning of the interview the participants were given a bottle of water and together we read through the letter of invitation and discussed the aims of the research (Appendix II is the letter of invitation used in the study). Thereafter informed consent and the ethical issues were covered and the purpose of the research was discussed. Appendix III is the participant consent form used together with the standard departmental ethical forms. It was explained to all participants that my focus of interest was an understanding of them and their experiences whilst gaming online with there being no right or wrong answers. All participants were thanked for volunteering and told that if at any point they felt uncomfortable or wanted to withdraw they could do so.

Preparation for facilitating the interviews involved reading relevant chapters and papers on the interview process and being prepared for possible difficulties that may emerge, such as: Responding to participants who are not talkative or articulate, dealing with participants who are ramblers, assisting participants when they appear uncomfortable with a particular line of questioning, gaining clarity when participants appear to contradict themselves or are confused and don’t understand the question, as well as how to handle participants who may ask personal questions, flirt or be inquisitive (Aitken, 2009; Kvale, 1996; Marsiglio, 2009; Mayers, 2006; Smith & Osborn, 2007). I chose not to write anything down during the interview and, as I was familiar with the interview schedule, I focused rather on making the participant feel comfortable, listening actively, maintaining eye contact, building rapport and becoming engaged in the process.

The interviews concluded with the participants being asked if there was anything else they would like to talk about and how they had experienced the interview. They were again thanked for their valuable contribution to the research project and encouraged to contact me should any issues relating to the research or concerns they may have emerge for them at a later stage.

The interview was recorded on a digital recorder to generate transcripts to be used for data analysis. According to Smith and Osborn (2007, p. 65), “while the record it produces is fuller, it is not a complete „objective“ record”. This is due to it excluding non-verbal behaviour and requiring a “process of interpretation by the transcriber or any other listener”. To overcome the first limitation, I made notes immediately after the interview of non-verbal behaviour that I felt was significant including body language and changes in the participants’ tone of voice.

I then followed Marsiglios’ (2009) guidelines for preparing an interview summary. This included a brief description of the main points and events that the participant had shared and three types of memos. The first was a theoretical memo which involved summarizing any theoretical ideas or concepts that had surfaced during the interview. The next memo dealt with the methodological aspects of the interview. This required reflection on what had happened during the interview that may have affected the quality of the data, the way the interview was conducted, the participants’ comfort level, the questions asked and any other issues relevant to how the interview took place. The third memo involved noteworthy personal issues and how I had experienced the interview.

4.4.3. Data analysis and levels of interpretation for doing IPA

The whole interview, including the interviewer’s questions, is transcribed for IPA analysis. Smith and Osborn (2007, p. 65) state that the transcription is at the semantic level as one needs “to see all the words spoken including false starts, significant pauses, laughs and other features worth recording”. Fade (2004) reinforces this suggesting that non-verbal communication, which is helpful when interpreting the data, be inserted into the transcript. According to Mayes (2006), each transcript is read several times so that the analyst is completely familiar with the transcript. This is supported by Smith and Osborn (p. 66) who explain that the researcher needs to engage in an interpretative relationship with the

transcript. They continue suggesting that the attempt to do justice and capture the content and complexity of the meanings of the participants, to learn about both their social and mental world, when these meanings are not transparently available, requires a “sustained engagement with the text and a process of interpretation”. The participant’s talk may suggest or make manifest beliefs or constructs that they have or the analyst may see the participant’s story as representing a piece of their identity. The first interpretative level can be understood to be a detailed phenomenological reading or „thick description“ of, in this research, the participants’ experience of gaming online. As the researcher begins interrogating the participant’s sense-making, Eatough and Smith (2008, p. 190) state that “the interpretative levels acquire more depth” due to the “iterative nature and sustained immersion in the data of an IPA”.

A margin is left on both sides of the transcript for analytic comments. After reading the script several times annotations with initial comments are made in the left hand margin (Chapman & Smith, 2002). Smith and Osborn (2007) refer to this as „free textual analyses“. The researcher will look beyond the words at face value and move to the stage of interrogative and conceptual coding (Mayers, 2006). These comments will include striking issues, associations, contradictions, echoes, summary points, clarifications, amplifications and links to other parts of the transcript (Mayers, 2006; Smith & Osborn, 2007). Mayers (p. 8) explains that “all the time the implied question is: what does this mean to the participant?” The aim is to highlight key objects, experiences and events in the participants’ life-world. The complexity shown in each transcript is a valued quality in IPA. According to Sansom (2005, ¶ 13) it is “by virtue of the way they rupture and fragment more obvious and seemingly straightforward meanings” that they aid a fuller interpretation of the participant’s story.

Fade (2004) says that to assist with identifying examples of different themes at a later stage of analysis, it is useful to number the lines. Once this process has been completed for the entire transcript, the researcher returns to the beginning and through a process of abstraction uses the right hand margin to note and name emerging themes (Fade, 2004; Mayers, 2006).

4.4.4. Looking for and finding themes

Smith and Osborn (2007, p. 68) detail this step of the process saying that: “The initial notes are transformed into concise phrases which aim to capture the essential quality of what was

found in the text” and “the themes move the response to a slightly higher level of abstraction and may invoke more psychological terminology”. According to Fade (2004), the naming and abstraction of themes requires considerable interaction with the text and is a challenging process. She claims this is due to the names given to actions, objects, events and interactions in the data needing to reflect the context of the respondent’s words. Mayers (2006) states that, theoretical connections are hinted at while being firmly grounded in the participant’s words.

As the level of interpretation becomes more conceptual and abstract, it is suggested by Eatough and Smith (2008) that the researcher cautiously considers and theorizes the data. Fade (2004) encourages the researcher to keep memos outlining analytical decisions as these will assist in further analysis and provide a rationale for the analysis. When similar themes emerge through the transcript the same theme title is repeated, with the number of emerging themes reflecting the richness of the particular passage (Smith & Osborn, 2007).

4.4.5. Making the connections between themes

This stage of analysis requires the researcher to look for connections between emergent themes. This process is described by Smith and Osborn (2007) as listing these themes in the order they appeared in the transcript. Then the researcher attempts to make sense of the connections between themes and to order them in a more theoretical or analytical way. Fade (2004, p. 649) suggests that: “One way to approach this task is to ask questions about a theme and see if other themes answer those questions”. Mayes (2006, p. 17) suggests that connections may be made through: “polarisation (cluster opposites), subsumption (superordinate categories start to embrace other exploratory codes) and imposition (organizing categories introduced from existing theory)”. Clustering may occur between some themes capturing the participants’ experiences, concerns and meanings on a particular topic. A table of themes is produced and the clusters are named. In considering what these sub-themes have in common an overarching or superordinate theme emerges and is named.

Mayes (2006) states that it is often necessary at this stage to return and re-read exactly what words were used in the transcript. Smith and Osborn (2007, p. 72) support this saying that to make sense of what the participant has said, the researcher draws on their interpretative resources, “but at the same time one is constantly checking one’s own sense-making against what the person has actually said”. Practically, both Fade (2004) and Smith and Osborn

advise printing copies of the transcript which can then be cut and pasted to assist in the process of clustering as extract material can be condensed, edited and moved where needed. Thus a table of emergent themes is created.

Smith and Osborn (2007, p. 72) clearly outline the next step of analysis. A table is created listing the themes along with their superordinate theme. An identifier is included for each instance to assist in organizing the analysis and to facilitate in locating the original sources. Key words from particular extracts and their page numbers of the transcript are indicated by the identifier. The identifier highlights a good example of the relevant theme. At this stage of the process themes may be dropped if they do not fit in well with the emerging structure or are not very rich in evidence in the transcript. Chapman and Smith (2002, p. 127) summarize this level of the interpretative process: “Each superordinate theme is connected to the underlying themes which in turn, are connected to the original annotations and extracts from the participant”.

If more than one case is being analysed, the themes from the first case may be used to assist in orientating subsequent analyses or may be put aside and the next case begun from scratch. Smith and Osborn (2007) note that discipline is required as repeating patterns must be acknowledged as well as recognizing new issues that may emerge. The aim is therefore to respect both convergences and divergences in the data. Some themes may gain further illumination and others may emerge late in the analysis. If this occurs, they suggest that as IPA is an iterative process, earlier transcripts are reviewed in light of a new superordinate theme, and instances from these transcripts are included in the on-going analysis.

A master list of themes for the group is then drawn up. Fade (2004, p. 650) states that pruning may be necessary and should be made “on the ability of the theme to illuminate other themes and on the richness and power of extracts of data that the themes represent”. Superordinate themes included in the final master list should represent themes shared with examples of sub-themes from each interview. Smith and Osborn (2007, p. 75) claim that the analysis which results, respects both “theoretical convergence but also, within that, individual idiosyncrasy in how that convergence is manifest”. This allows the analysis to be pushed to an even higher level.

4.4.6. Connections and patterns between recurrent themes

Consideration is given to how the emergent themes inter-relate and a visual representation of the patterns is presented (Mayes, 2006). The table of superordinate themes is translated into a narrative account expanding the visual representation and interspersed with verbatim extracts from the interviews (Chapman & Smith, 2002; Fade, 2004; Mayes, 2006; Smith & Osborn, 2007). The meanings inherent in the participants' experience and story are outlined with the themes illustrated, nuanced and explained. The creative, processual feature of qualitative psychology becomes evident as the researcher is often prompted to extended analytic commentary on the unfolding narrative, always taking care that their interpretation and participant's talk is clearly distinguishable (Smith & Osborn, 2007). A discussion is then presented linking the analysis to the literature review or links with the literature may be shown when each superordinate theme is discussed. Mayes (2006, p. 9) explains that this final stage is the construction "of a conceptual framework that succeeds in relating the themes back to theory, and to the literature".

Throughout the IPA study the core commitment has been shown to be, "the importance of sustained engagement with individual personal lived experience and the individual's attempts to make sense of that personal lived experience" (Eatough & Smith, 2008, p. 192). Applying IPA in this study allows expression of the subjectivities as experienced by the participants, an aim of the thesis.

4.5. Ethical approaches to the research

The system of moral principles by which the researcher can judge their actions and the actions of others is of concern when dealing with the ethics of a study. The main issues include: The rights of confidentiality and privacy of participants; the voluntary nature of participation; consent of participants; the confidentiality of data and identifiable participants and their anonymity, the way in which data is collected, the effects on participants of the way in which it is analysed and reported, as well as the researchers professional standards of conduct throughout the process.

It is worth noting that an ethical issue did arise during this study. Participants were invited to choose a pseudonym by which they would be referred to in the study. Two participants selected their online names, the other two wanted to be called by their birth names. Initially

the researcher did this, however, during the analysis it became clear that some of the data could be incriminating for participants due to the illegal status of, in this situation, marijuana, and their use of it. Being a novel finding that needed to be included in the results, the answer to the issue was to refer to all participants in a way that protected their privacy and did no harm. Random initials were used thus protecting all participants' identity.

4.6. „Validity“ and „reliability“ in the research

Qualitative research results in a different type of knowledge being generated through the research process, to that of quantitative research. As an alternative to the traditional quantitatively-oriented criteria for judging the soundness of a study, Guba and Lincoln (1989) propose four criteria to better reflect the underlying assumptions involved in qualitative work. Table III adapted from Trochim (2006) lists their criteria in comparison to the quantitative position. The conclusions we reach about the quality of our research will reflect either as research validity and reliability if we are positioned in a quantitative paradigm, or, as the credibility of qualitative research, which depends on the ability and trustworthiness of the researcher. Due to the scope of this thesis I shall not discuss the quantitative criteria but focus on the alternative, qualitative criteria as presented in Table III.

Table III.

Quantitative (alternative) and qualitative (traditional) criteria for judging research

Quantitative research	Qualitative research
objectivity	confirmability
reliability	dependability
internal validity	credibility
external validity	transferability

Note: Adapted from "Interviews" by W. Trochim, 2006. Unpublished manuscript

Golafshani (2003, p. 601) states that "to ensure reliability in qualitative research, examination of trustworthiness is crucial". The research report lies at the heart of these issues with trustworthiness comprised of the above mentioned principles: credibility, transferability, dependability and confirmability. Trustworthiness, rigour and quality are reflected in the execution of the study in the qualitative paradigm. Kvale (1996) emphasizes quality of

research, which is done by checking, questioning, and theorizing on the nature of the phenomena investigated. This he refers to as an expression of craftsmanship which is communicated through a conversation about the observations and other aspects of the research, including the researcher's impact on the study.

Confirmability refers to the degree to which the results and findings of a study could be corroborated or confirmed by others (Trochim, 2006). To enhance confirmability in this research a number of strategies were employed. Throughout the study I documented the procedures for checking and rechecking the data. Personal biases and my immersion and involvement were reflected upon through journaling. With respect to the analysis and results, a paper trail was maintained and discussions held regularly with the supervisor of the thesis enabling each stage to be monitored for potential bias and distortion and for ideas and interpretations to be discussed, challenged and explored.

According to Trochim (2006), dependability emphasizes the need for researcher accountability with regard to the ever-changing context within which the research occurs. To ensure that the findings are dependable it is required that if the study were to be repeated that there would be similar findings. In this study dependability was ensured through ensuring that participants understood the research topic clearly and that they fitted the sample inclusion criteria. The data collection process was consistent only with changes in location as to where the interviews were held; the format for each followed the same sequence.

Credibility in qualitative research involves establishing that the findings and results are credible from the participant's perspective. The purpose of this approach is to understand or describe the phenomena being studied from the participant's position. It legitimately makes sense, therefore, that the only ones who can judge the credibility of the results will be the participants. To gain a deep and meaningful understanding and interpretation of what gaming online meant for the participants, an allocated duration of one and a half hours was set aside for the interview. Although lengthy, all went beyond this time frame, with participants communicating their experiences in an unhurried way. This allowed for the topic being discussed to be explored until saturation point. Prolonged engagement with the participants encouraged a compatibility of meanings between those interpreted by the researcher and those of the participants.

Follow up contacts with the participants occurred telephonically and via e-mail with feedback given, meanings clarified and results discussed. This also allowed the participants the opportunity to add any new insights or ideas that had developed since their interview. They were also encouraged to contact the researcher should anything further related to the study arise for them. One participant was particularly forth coming and invited me to join the guild he belonged to. He organized special permission with the guild masters and soon I was a member. Although I did not visit very often or contribute in any way, the opportunity gave me an insight into the gaming world, through the lens of the gamer, that I otherwise would not have had. He also occasionally sent links to interesting gaming websites and invited me to gaming sessions. Another participant, had unbeknown to me, organized for a group of gaming friends to visit after our interview which had taken place at her home. This too provided me with an experience of gamers and their world that added richness to my understanding of the field and the meanings they ascribed to their experiences.

Transferability refers to the extent to which the results of a study can be transferred or generalized to other settings or contexts. Trochim (2006, ¶ 3) explains that the qualitative researcher “can enhance transferability by doing a thorough job describing the research context and the assumptions that were central to the research”. He continues to state that the responsibility then lies with the person who wishes to “transfer” the results to a different context, to determine how sensible the transfer is. I have attempted to create a foundation for transferability by providing detailed information on the research procedures, the choice of method used and the research context. Research findings in this context for this study can act as a point of reference and comparison for others.

CHAPTER FIVE

DATA RESULTS AND ANALYSIS

5.1. Introduction

The following chapter presents the results of this research project. It begins with a brief historical and contextualized narrative account introducing the participants. This offers the reader the opportunity to contextualize the understanding of the themes inducted through the analytical process. The participants' histories of gaming online, descriptions of their self-perceptions as a gamer, and a brief note of how they have experienced the role of family to impact on their experience of being a gamer and gaming is presented. Through follow up contact it has been possible for the researcher to confirm these summaries to be an accurate reflection of their general experience at the time.

The IPA method for data analysis as outlined in chapter four was used to guide the analysis. The results and analysis will be presented in two sections. Section A will explore the phenomenon under review, flow, as it emerged in the data. The description and interpretation of flow allows one to discover, determine and articulate meaning which informs our understanding of the phenomenon. The following superordinate themes were identified; intention; pre-gaming rituals; and gaming process. An analysis and interpretation of each theme and the related sub-themes is presented. For each theme detailed descriptions of participants' accounts which best illustrate the nuances and themes are provided.

Following this format, section B explores and explains the emergent and recurrent themes, patterns and connections relating to the participants' social experience both in and out the game. The iterative process of IPA became apparent in the analysis as transcripts were revisited and reviewed in light of the superordinate theme that emerged, a gamers way. Three sub-themes illustrated the gamers way, these being; relationships in and out the game, online multiple identities and online codes of conduct.

5.2. Overview of participant narratives

5.2.1. G. Postgraduate university student

G has been gaming online for 12 years and during the term spends a minimum of one hour per day gaming. Internet connections and the financial costs of gaming online have

influenced his access to and experience of gaming. His favourite genres and games are strategy and first person shooter, particularly Quake and Starcraft. G lives in a flat with M, a fellow gamer and participant in the study. Although he lives the lifestyle and games daily with M, he identifies his friend as “a gamer”, yet does not attach himself personally to that role or label. The influence of his family on his self -perception of being *a gamer* can be noted as the following extract shows.

G: I don't want to, I've always been in a family where computers are bad and anti-social and an anti-social activity, so, because of that I've just tried to distance myself as well (Interview 1, p. 31, # 743 -745).

5.2.2. T. *In-between jobs.*

T is the only female participant. She is a very expressive 25 year old and currently “in between” jobs having resigned from her studies at university. She lives together with her boyfriend and a friend, all committed gamers.

Growing up with computers and educational computer games bought for her by her mother, at the age of 14, T, after winning an English Olympiad, used her prize vouchers, pocket money and earnings from doing small jobs, to purchase her own choice of games. At this age she reached a turning point in her perception of herself as a gamer as the following extract highlights:

T: I'd say that was when I became a gamer-gamer at the age of 14 and not just a casual gamer (Interview 2, p. 25, # 829 -830).

Although she has been gaming for many years, access to the internet has been intermittent and it has only been in the last year that she had been gaming online regularly. She spends approximately one to two hours during the week gaming if employed. If not, she is often gaming or on the internet all day and/or night. Role play and strategy games appeal to her most strongly and she dislikes first person shooters. Acknowledging that there have been periods when gaming has been all consuming and destructive, she now refers to herself as “proudly geek” with gaming an integral aspect of her personal and social life.

5.2.3. M. Postgraduate student

M is a perceptive, eloquent 23 year old and has been gaming online for almost 13 years. When not studying he spends a minimum of seven hours a day gaming online. He plays competitive fighting games and enjoys first person shooters. He has played professionally in national and international gaming tournaments. Gaming is well supported in M's family and an activity shared with them during his childhood. He describes his father as also being an "avid gamer" and is able to recall poignant memories of gaming together with him.

M: One of my first memories is me and my father and my sister playing Jaybird, it was black and green colours with this little bird jumping around and the snake chases after you. I can remember the noises and when I hear the noises I get all nostalgic, so it's very much been a part of my life (Interview 3, pp. 20-21, # 638-642).

Gaming has been an accepted and encouraged leisure activity in M's life. He is however, currently grappling with his perception of outgrowing the online gaming community and justifying his gaming needs. The reader may refer to Appendix V for M's complete interview transcript.

5.2.4. F. Undergraduate student

F is 22 years old, confident and enthusiastic. He recalls his first computer game experience on DOS being Teddy Bear Picnic and has fond recollections of gaming with friends and cousins during his youth. He has been gaming online for six years. He estimates spending between 12 and 17 hours a week gaming online. His favourite genres include role play, first person shooter and strategy games, such as Guild Wars and Starcraft.

Identifying himself as a "casual gamer" who deviates from the norm as he does not "look like your typical gamer", F has had to find a balance between gaming and his personal responsibilities. His parents have expressed concern that he may be addicted to gaming and require constant reassurance that he has "toned down" his play. He explains the role of gaming in his life:

F: Yes, everything I do revolves more or less around either the next game or the game I'm playing. I can actually pinpoint moments in my life by the games I've played (Interview 4, p. 1, # 12-14).

5.3. Results

Having met the participants in the study we continue to the results of the analysis which are tabulated below and reflect key terms and concepts showing the superordinate and sub-themes. The analysis will show how some themes can be seen to interrelate, repeat, and refer back to each other, whilst others emerged as novel. A process of induction was carried out by the researcher to generate these themes. Appendix VI shows an example of a stage in data analysis; the diagram illustrates a stage in the analysis of the subtheme relationships in and out the game.

Table IV

Section A. The experience and meaning of gaming online

Superordinate Theme	Sub-themes
Intention	Fun, relaxation and escapism Mastery and challenge
Pre-gaming rituals	Marijuana Gaming space
Gaming process	Time Cognitive processes Embodiment

Table V

Section B. The social experience and meaning of gaming online

Superordinate Theme	Sub-themes
A gamers way	Relationships in and out the game Online multiple identities Online codes of conduct

5.4. Data Analysis

Transcripts were revisited continually during the process of analysis. This enabled the researcher to immerse herself in the participants' accounts and encouraged reflection and the unpacking of subtlety, intricacy and nuance within the data. The uniqueness of each case was

respected together with the emergent themes showing patterns and connections that could be explored across cases. These connections were conceptualized and the data was organized and represented in tables, maps and illustrations. The repetition of emergent themes across transcripts and their recurrent status determined which superordinate themes and related sub-themes, were to be represented in this particular analysis. What has emerged as the outcome of the analytical process can be described as multi-dimensional and reflective of the double hermeneutic circle in IPA. To enhance accuracy, „validity“ and persuasiveness, extracts from interviews are provided within each section. A brief introduction to each superordinate theme enables the reader to identify the researcher’s position and process of interpretation.

5.5. Section A. The experience and meaning of gaming online

Superordinate Theme	Sub-themes
Intention	Fun, relaxation and escapism Mastery and challenge
Pre-gaming rituals	Marijuana Gaming space
Gaming process	Time Cognitive processes Embodiment

Section A will present extracts from the participants’ transcripts that emerged as highlighting and expressing their experience of online gaming as an activity in itself. Issues that are addressed include their motivation for gaming, preparation for play and the experience of the actual gaming process. The following superordinate themes will be discussed: Intention, pre-gaming rituals and gaming process and their relevant sub-themes as presented in the results.

5.5.1. Intention

Superordinate Theme	Sub-themes
Intention	Fun, relaxation and escapism Mastery and challenge

Intention, by general definition, refers to a conscious striving towards some goal or end state. One's beliefs, purpose, plans or aims will be directed and focused on achieving this objective. Immersed in the data it became apparent to the researcher, that the meaning one ascribes to an experience will be related to what one anticipates the potential outcome, the returns, to be of the energy invested in the experience. We choose to do something in anticipation of what it may bring. Each of the participants discussed their own reasons for gaming, of which the social aspects will be discussed in Section B of the analysis.

Gaming is a dynamic, fast paced evolving leisure activity. The participants identified a number of factors that they felt influenced and motivated their decision to spend time gaming. These revealed their intentions. They will be explored through the sub-themes; fun, relaxation and escapism; and mastery and challenge. The researcher categorized these experiences under the superordinate theme of intention since they all pertain to choice based on an anticipated outcome.

5.5.1.1. Fun, relaxation and escapism

All four participants found *fun* an aspect of gaming that made it a compelling experience to seek out. T captures this in the following extract.

T: Gaming is argh, it's fun, that's what it is, it comes with a whole host of other things like a bunch of friends who think the same way you do and you have time to yourself, but basically, it's just fun, and that's what everyone is looking for, right? (laugh) (Interview 2, p. 26, # 848- 851).

More emphatically, G reinforces this view stating:

G: Yes, yah, yah, it is meaningful, it's like fun for everyone, fun, fun, Fun! Fun is the thing, the name of the game (Interview 1, p. 19, # 462-463).

A motivation for gaming included using it as a platform for release and relaxation, the intention often being to escape from everyday reality. This was particularly so for T, who unlike the male participants was not as driven by the competitive elements but rather by the opportunity the gaming experience gave her to forget about her everyday worries and to have the opportunity to relax:

T: ...you can sit down and kill a thousand orcs and you've forgotten about all your worries for a while and you come out of it more relaxed... (Interview 2, p. 2, # 36).

T: If I'm losing a game I know it's just a game. A lot of people don't (laugh) and a lot of people get super into it but I'm like, it doesn't matter if I win or lose this, at least I'm out of life for a little bit (Interview 2, p. 2, # 58 -61).

Gaming seems to provide her with a safe space, although itself often violent in content, a type of sanctuary to escape to. In the following extract the destructive aspects of escapism and excessive gaming link as she explains her experience of gaming in the past.

T: A lot of the time when gaming has been bad for me, is when I've been seriously depressed and like proper depressed, like Fort England depressed and I want to escape reality and then I don't talk to my friends, I don't, like I said it's not a problem for me now, cause I'm not using it as an escape thing but when I've been really sad I find I'm like, well I'm not going to do any of the things I've got to do and just do this. There's a certain point when all you're doing is playing games instead of all the stuff you have to do in ordinary life, then that's really bad (Interview 2, p. 23, # 741-750).

M presents his position as a positive option in seeking a route to escapism and compares it in a favourable light against recreational substances that can be addictive:

M: I would say it is a form of escapism, its' better than drinking heavily or doing drugs, or some other stuff (Interview 3, p. 17, # 534-535).

This case contrasts with the experiences of two participants who combine smoking marijuana with gaming. Here the sub-themes of escapism and relaxation merge with the participants' described experience of time. Time investment and an altered sense of time in gaming relates to the use of marijuana by some participants. For G his aim in gaming is to *escape* and lose a sense of time which is reinforced by gaming „stoned“. In the extract that follows he discusses his experience of playing the game Quake.

G: It's the only escape I have and it's one of the best games I have and I'm good at it and it zones me in. It definitely like, does wipe out time, better than any book does, you know, especially when I'm stoned (Interview 1, p. 5, # 112-115)

This issue surfaced again towards the end of the interview when he spoke frankly about his personal situation, boredom and gaming.

G: I do, I try to, but now that I'm on the Greens I game, cause fuck, I've got this network and I'm in fifth year, half my friends are gone, and I get stoned and it's just what I do. Play a game, because I'm bored essentially (Interview 1, p. 31, # 755-758).

The use of marijuana and gaming will be returned to when we explore the superordinate theme of pre-gaming rituals. It is a recurrent topic both within and between cases. Although not all participants used marijuana whilst gaming, all used drug discourse and discussed "addiction" to gaming at some stage of their interview.

M: I just love overcoming it. Even if the game is obscenely challenging but fair, then I'll just be completely *addicted*. I will like, yah, I just can't stop playing. That I definitely take away with me, but I've become almost driven by it. It's a weird experience, it's hard to describe. In the back of my mind I'll be thinking about it when I'm concentrating on work or anything else (Interview 3, p. 6, # 177-181).

5.5.1.2. *Mastery and challenge*

The sub-theme mastery was selected to represent what inspires a gamer to spend time focused on a virtual realm with the intention of achieving success and excelling in this realm. Aspects that emerge in this subtheme are echoed in Section B when the role of the self and the other is teased out. Let us consider the extracts that reveal how the gamers achieve high levels of accomplishment and meaning through the cognitive and physical challenges offered through the digital.

G: I'm *challenging* myself, I know what I am capable of and then when I don't perform I can push myself and I feel really good, so it is a kind of feeling (Interview 1, p. 3, # 62-64).

For this participant both personal challenges and those within the game, as well as the associated positive feeling experienced, were dominant reasons for playing. He referred to the challenges he expected in gaming at different stages of his interview showing the significance this aspect of his experience has for him. These extracts show how this emerged in the data.

G: *Challenge*, mainly, „cause I think I'm good and you want to play against someone else (Interview 1, p. 1, # 13-14).

G: That's why you're playing an online game, because they are unpredictable, yah, completely unpredictable. *Challenging!* Fascinating! (Interview 1, p. 23, # 550-552).

This reason is strongly supported in M's transcript, the extract presented below shows *challenge* to be a recurrent concept across cases.

M: Uhm...there's always a longing to go back to it, especially if there is challenge involved. I have an obsession; I'm going to call it an obsession, with challenge in a computer game (Interview 3, p. 6, # 172 -175).

This attitude and motivation for gaming is also clear in G's transcript:

G: It's sort of like skill and challenge. You play *Counterstrike* and some people are disgustingly good and it's for the challenge to try and like outsmart, win, beat (Interview 1, p. 2, # 25-28).

The competition in gaming strongly motivated M, whose intention and drive for mastery in the gaming domain is reflected in the extract:

M: It's the competition of it, when you lose in a videogame, it's frustrating. It's like losing in a sport or any form of competition, but in this, there's something about it that just drives you to get better, it just drives you to get much better at it, yeah... I enjoy improving and playing against opponents better than me (Interview 3, p. 2, # 33-37).

Developing his gaming skill appeared important for M on many levels as it emerged several times in his interview. Initially he showed ambivalence stating that he wasn't sure whether it is to better himself or to beat the person better than him or rather a combination of both that motivated him. Further on in the interview he did, however, identify a goal of his in gaming as being to improve and be better than his opponents. This corresponds with his intention to develop his gaming skills. He experienced the challenge to improve his game play as fun and positive.

The challenge of gaming against a human opponent or fellow gamer in online games is significant for all male participants. As revealed by F, this interpersonal competition unfolded in the layered dynamics that operate whilst gaming online. His extract introduces and captures the social aspect to the concepts discussed above and will be returned to in Section B.

F: You always want to test your skills against another person, back in the day it used to be fighting or running, and now with this new medium it's all about your

skills as a gamer. Like when I was playing my low level paladin I was so happy when I defeated a character three levels above me even if he got angry with me afterwards. That was because it proved my skill above him: I knew I was better than him. Some people lord over other people, like “ooh, look how much better I am”, and they call you like newb and so on, which has become a derogatory term. It used to mean you are a new player and people must help you or watch out for you, whatever the case is, now if you called a newb it’s basically an insult. So it’s very much the challenge aspect, the challenge of working with another person, or working *against* another person (Interview 4. p. 21, # 815-825).

All participants identified how mastery is acquired through practice, interpretation and understanding of the multidimensional aspects involved in gaming skilfully as an individual and as part of a team. As an expert gamer M offers a clear, detailed description and understanding of the cognitive and motor skills required to do this:

M: Well, games are designed...I’m trying to think of a way to put this...games may seem very similar. It’s going to be hard to differentiate between looking at two first person shooters or two role playing games, cause ultimately they’re the same thing. FPS is a screen with a cross in the middle and RPG is a screen with numbers in the middle but there’s a lot more subtlety to it than simply that, the perspectives may be the same, some things will be the same but others will be completely different. The way you have to think while playing it is going to be different, the way you have to move while playing it is going to be different and there is a general set of skills that you can take with you, like your accuracy with the mouse, controller and game pad. It’s a good general skill to have, but most of your skill comes from learning the game system itself...You can have good theoretical knowledge of the game, but with no practical skills you can’t play it, and visa-versa. You can have very good practical knowledge but without any theoretical knowledge you’ll lose, you need a combination of both (Interview 3, p. 9, # 284-301).

From this discussion we can observe that for the participants“ there are parallel intentions occurring simultaneously. The challenge of improving their individual skills offers a sense of personal satisfaction and growth. Competing fiercely with other gamers online triggers issues of social dynamics, power and rivalry as well as comradeship and teamwork as strong motivating factors. The goal of defeating the opponent is of paramount importance and inextricably linked with both what you know and who you know.

Standing apart, T was unconcerned with the challenge of winning or losing as her intention was to enjoy the gaming experience itself. She has no specific goal to achieve in her style of gaming. It is rather her imagination and creativity that are explored through her choice of narrative that she applies to the game she is playing.

T: There's no goal, you just do it. They [*male gamers*] play it and they get bored after a while and they've maxed everyone's stats up as high as they want, but when I'm playing or other girls are playing, and I've talked to people about this... they are making up a story in their head as they go along. So instead of it being a game that you do this and then you achieve this level and stuff, it's like a virtual dolls house basically... (Interview 2, p. 7, # 217-222).

It becomes clear from the data that different genre games require different skills and offer different challenges and opportunities, ultimately resulting in gaming experiences that are determined by the individual's intention and choice of game. The difference in gaming styles and experience between male and female gamers is an area worthy of further investigation.

5.5.2. Pre-gaming Rituals

Superordinate Theme	Sub-themes
Pre-gaming rituals	Marijuana Gaming space

It became evident that for some participants creating a psychological space, mood or altered state of mind for gaming, as well as, or paying attention to the ergonomics of their gaming environment was significant and ritualized. These procedures that surfaced as patterns across and/or within transcripts are connected and presented as sub-themes to the superordinate theme of pre-gaming rituals. Pre-gaming rituals are activities that are repeated prior to the gaming process and gameplay itself. The sub-themes are marijuana and gaming space.

5.5.2.1. Marijuana

Having not come across literature or studies that researched marijuana with flow and gaming, it is included as a sub-theme under the superordinate theme of pre-gaming rituals as this was when the participants described using it. Both T and G had experienced starting gaming sessions high. Although it enabled the participants to focus and increased the visual impact of the game, it also is shown to negatively affect co-ordination and energy levels. T gave a colourful description of her experience:

T: You come home, have a bong, aaaahhhh, and you'll go sit in the chair and get all excited cause you're going to play DOTA, uhm, yah it's lovely... and...when you're playing DOTA when you are [*stoned*], it's so sparkly with spells and explosions going on, it's gorgeous (Interview 2, p. 5, # 157-166).

This extract from G describes his experience of how the marijuana effect wears off during the game.

G: Yah, most the time I'll start the game stoned, cause I'll have a joint before the game and slowly that wears off and you get more into it, and you can tell like, you were drifting off like this and then you're into it and by the time the game ends you're exhausted and spend twenty minutes just making tea (Interview 1, p. 24, # 578-582).

Neither gamer smoked *during* gameplay although T did elaborate on how her boyfriend was able to. The following extract shows T finding meaning and making sense of her use of marijuana and gaming during periods when both were used destructively:

T: That's not got anything to do with marijuana, it's not got anything to do with games, it's got to do with you and the state that you are, for example, last year when I was severely depressed: I played games a lot and also smoked a lot of pot and these two things made me feel better but they didn't change any of my problems, like they didn't do anything for me in the real world, it took going to get help, going to get antidepressants and stuff to do that, so once I feel good, I do the same things but they don't consume my life like they used to (Interview 2, p. 23, # 758-765).

It is of interest to note that both participants also discussed the importance of having an allocated comfortable gaming space as necessary for a positive gaming experience.

5.5.2.2. *Gaming space*

Gaming in a relaxed space can result in a positive emotional and physiological experience for some participants. For T, as the following extract suggests, this relates back to the subtheme of relaxation previously discussed under the superordinate theme of intention. The following extract also touches on embodied gameplay which is explored later in this analysis.

T: If you have, like a gaming space. For me this is it, it's my chair, it's like as soon as you enter that gaming space I really do think that you become less worried, your physical, ugh, okay let me start again...as soon as you enter your gaming space that's your nice safe space, basically you calm down, um a lot of it is mental for me cause I tend to live in my head, but I have noticed that you relax a bit, you know you'll stop tensing your shoulders, um yah, all the stress sort of goes away (Interview 2, p. 2, # 49-56).

G expresses how his gaming environment can impact on his range of experiences. He recognizes his behaviour as repetitive and symbolic with psychological implications.

G: Often you push the keyboard away and it's like your environment that's pissing you off and not letting you play as well, but mainly it's just you. There is like a kind of tick I have these days, like I'm rearranging the keyboard and the mouse and like, to play better... Yeah, these days I clear my desk before I play, it's just important to have a space to like be in, in the same sense of comfort, to grow and experience in certain circumstances (Interview 1, pp. 25-26, # 614 -626).

5.5.3. The gaming process

Superordinate Theme	Sub-themes
Gaming process	Time Cognitive processes Embodiment

Having explored and described the gamer's experience of creating a comfortable gaming space and their preparation for play; we now consider the gaming process. Derived from the Latin *processus*, the term process means a progression towards some goal or aim (Dictionary of Psychology, 2001, p. 567). The gaming process thus relates to the gamers involvement and experience of game play during a gaming session, the time between logging into the game and logging out. The following subthemes were drawn from the transcripts; time, cognitive processes and embodiment.

5.5.3.1. Time

The significance of the concept of time in the gaming process is shown again to be relevant and relates to previously discussed themes. The concept of time is complex and revealed itself as such to the researcher whilst attempting to unpack this sub-theme. Taken on an abstract level time can be seen to be experienced as something external to oneself and controllable, for example in the prior theme of fun, relaxation and escapism, G felt that smoking marijuana and gaming "wiped out time". Time distortion and the experience of it feeling slowed down is also a hallucinatory effect of marijuana. Time is experienced by participants psychologically, for example, as having *a loss of sense of time* and cognitively as something to deal with, to organize and manage. Time management was raised by all participants when discussing the gaming process. Games played with others required a commitment to being available to do so at the time decided for the length of the game. Participants expressed facing dilemmas at times in meeting their responsibilities to others in

the game online and at the same time meeting the demands of others in the everyday world. The following extract by M highlights the engagement and immersion that can be experienced and the unawareness of the time invested whilst gaming:

M: We were so into it that we just sat down and played constantly, constantly, constantly, and before we knew it, it was the middle of the night, we played until four in the morning (Interview 3, p. 23, # 717-719).

Time needs to be allocated for game play, practice and training. The pace of the game and the impact this has on the experience and enjoyment of the game also finds expression in the voices of the participants. The time it takes to play a game is relevant and this leisure activity can become all-consuming as described by T under the sub-heading fun, relaxation and escapism. This extract from the interview with M captures an experience of time where personal gaming style and speed and intensity within the game combine to create an enjoyable gaming experience:

M: I prefer a reality based game, so I like speed, like Quake 3 has. I also enjoy quick, fast-paced gaming sessions. I don't dislike long slow games, it's just my personal preference, I would much rather go in there and be my best for one or two minutes and then have another round after that (Interview 3, p. 3, # 80-84).

5.5.3.2. Cognitive processes

Cognitive processes, including thinking, problem-solving, memory, interpreting, organizing and creativity are present in the participant's experience of game play. Even though the participants mention times whilst gaming when they are unaware of their cognitive skills operating, to play the game requires the ability to sort, code, interpret, engage, make decisions and respond to the information of the game and other gamers. M spoke about his gaming experience in a way that highlights this as can be seen in this extract:

M: Uhm, I saw in the title you said something about flow, it feels like that. You just, you...I'm trying to think of ways to express it. I was talking about it to a friend the other day, you just...it feels like the game just sort of makes sense, and you understand the mechanics and you can do things perfectly, you can do it without even thinking...it becomes second nature. So when you learn to play the game without consciously thinking about it, but reacting rather, that's, that's one of the best things (Interview 3, p. 3, # 86-92).

Considering the genres of games played online by the participants, it can be noted how all involved cognitive skills in interpreting the games story line and successfully gaming. The

games played by the participants all had a story line, from simple to complex and layered. The story line of a game can influence the gaming process and experience thereof depending on one's cognitive abilities and the challenges of the game. It is an important aspect in gaming for F, who in the following extract, discusses his experience of his personal involvement whilst relating in the game:

F: In the new games they have tried to bring in love interests and it's very amusing trying to watch a love interest developing between this character you're playing who never says anything and this other female character who is always talking to you and you somehow, you fill in the blanks, you uhm, the game progresses, it railroads you to a certain degree and as a result certain actions on her part are very specific and as a result you get into the mode, and you start thinking what would I say, but in the context of what's happening (Interview 4, p. 2, # 68-73).

Discussed earlier under the sub-theme mastery and challenge, T felt the appealing aspect of storytelling in a game to be more enjoyed by female gamers rather than male, however the above extract by F shows his involvement in the game, which considering a favourite genre of game for him is role-play, does challenge her perceptions.

5.5.3.3. Embodiment

Across cases participants spoke of an embodied gaming experience and, in making meaning of their experiences, recalled strong physical responses whilst in the gaming process. As discussed above gaming involves cognitive, physiological and psychological responses. The following extract by G is an example of this.

Researcher: Could you speak more about that, like the feeling when you've pushed yourself and you've got to that point...

G: Well, I'm exhausted after an hour of Quake as I would be after an hour of a game of squash, like mentally I just can't play anymore, so I'll just die, you can shoot me, I don't have any more steam, but like in the moment of playing you'll just jump around and do anything. A move will come off and you see it and you fire a rocket over there and you hit him, like wheewh, it's predictable. But you're predicting at such a high velocity it's just ridiculous. I don't know, I don't even feel different now, but I'll know when I'm playing if I'm at that level or not, I don't actually feel any different per say I suppose, but I feel the intensity, if I'm matching up to it or not. Sometimes I do zone into it, like, I'm clearly like in the zone, and I have like six or seven kills in a row and then finally I'll run out of steam or laugh (Interview 1, p. 4, # 72-78).

Later in his interview G again refers to “the zone” and discusses his physiological reactions and responses, particularly when playing the game Quake. This can be seen to be a positive experience and meaningful for him. The design, mechanics and graphics of this game can be seen to trigger strong responses in the participant during the gaming process.

G: It’s the same with Quake I get really excited. It’s like you’re zoned into this thing, you’re always at the cusp with Quake when you’re feeling inspired all the time cause, you’re there. You have to be, so closely even with your mouse.

Researcher: That’s interesting, this whole sort of body experience that you have...

G: Yah, I know it’s so weird to think about it but Quake is like the only game where you’re this body and it’s so physical, it’s got good gravity and you can tell when you crouch and jump and rocket jump and you fly, you know what I mean, it’s got all of that, and I do yah, I do sort of feel a kind of weightlessness, or if someone rails you, phewch, you do this (physically reacts with body) (Interview 1, p. 31 # 761-768).

The gaming process for G can be understood to be experienced on an exciting and intensely physiological level. This was expressed by participants during the interviews through non-verbal behaviour highlighting its significance. An example can be observed in the above quotation. A physical response and awareness of the body during game play was shared by all participants. Playing certain games, like first person shooters, at a high level of intensity and involvement had direct and strong physical responses in the participants. G spoke of his experience and what was required to play at an optimal level several times during his interview.

G: My heart breaks out; I’m just so excited in general. You just get into it. (Interview 1, p. 3, # 50).

G: ...you’re just always thinking, how much more intense...I get quite worked up just thinking about it.

Researcher: Yeah, so it what is it making you feel?

G: Nah, I dunno, just excited, breaking into a little sweat, it’s like you get zoned, like really zoned... You have to play at a high level intensity for the enjoyment of it (Interview 1, p. 26 - 27, # 641-659).

The following extract shows this level of intensity echoed by another participant, M, as he describes his experiences during the gaming process. It is interesting to see the cognitive, psychological and physiological operating simultaneously and reflected in his narrative. The

peaks of the gaming process he refers to as intense, “rare moments”, this state is for G, experienced as being *zoned*. All participants described the gaming process as providing them with a sense of embodied awareness, not necessarily consciously experienced during the game itself though.

M: It’s very exciting. It’s an adrenaline rush in a situation in gaming you’re, your victory is unassured, when you might win or might lose and your actions determine that. So it’s very, very fun, incredibly fun! It’s one of the reasons I still play games today, it’s those rare moments.

Researcher: And how does that leave you feeling afterwards?

M: Uh, satisfied I guess, but wanting more, almost always. Either that, or, sometimes it’s so intense you just have to take a break. I can’t deal with that again for half an hour or an hour.

Researcher: What is the intensity of it?

M: It just requires a lot of concentration, like a heck of a lot of concentration. You wouldn’t think that from moving your hand and mouse around that you can be tired afterwards, but you get surprisingly tired and lose focus afterwards, can’t concentrate as well, because you invest a lot of concentration into trying to do something, it’s quite taxing (Interview 3. p. 14, # 416 -426).

M introduces an interesting area to explore when he speaks of becoming tired not only from the mental challenge of gaming, but also from physically interacting with the equipment. The equipment for gaming as a theme is an area worthy of further investigation as it was discussed by all the participants as a significant aspect of their gaming experience and in the gaming process itself.

The gaming space has been shown in this analysis to be significant, the mouse and controllers we are able to read as becoming an extension of the hand, the reflexes are sharpened and respond to signals received through the participants’ senses. During the analysis the researchers’ interpretation of M’s transcript highlighted the strong relationship between the participant and the equipment that stood apart from the other cases. The example of M highlights the subtheme of embodiment showing an erasing of the boundary between the self and technology and a recognition of the pleasure derived through this, as mind, body, and gaming system merge in unison. For the participant it is experienced in a meaningful way and expressed using the discourse we might normally ascribe to relations with other

humans not inanimate objects. Considering this theme of embodiment, M describes his experience:

M: Remember the first thing I said, it deals with the controls. Well, you lose yourself. You lose that distinction between your hands pressing buttons on a keyboard or on a game pad and you actually thinking about it, *it becomes all part of the same experience*. The adrenaline rush definitely feeds into it. You gain so much more focus and get it right, and get it right on a regular basis, that's very much part of the adrenaline rush as you're just able to predict the game, much, much better (interview 3, p. 21, # 647-651).

M eloquently describes his acute sensory perception during gaming and unexpectedly leads himself through conversation to an awareness of the positive affect and significance the actual gaming system through embodied experience, also has for him.

Researcher: So your senses are quite alert?

M: Very much so, and initially that's all very conscious. And you think about it, where's he going to go, oh he's going to go here, you try that out. But after a while you don't think about it, you'll hear that sound and your body automatically, you won't even think about it, you'll just find yourself automatically changing direction to go somewhere else. It comes to you naturally.

Researcher: So it's almost like you're at one?

M: Yeah, very much so. It's a very weird experience. Even now, I'm very surprised by it, that *I find myself connecting so much with something that isn't a person*. To understand something so well that isn't actually a person, to understand something that I've never spoken to, that it's actually a machine, it's a very odd experience. I don't fully understand where I get such an adrenaline rush from it, like I don't understand why I enjoy it so much. But I do, I love being at one with the gaming system, understanding it so well that you can act without thinking is one of the nicest things (Interview 3, pp. 20 – 21, # 663-697).

It is of interest to note how he considers and reflects on his feelings towards both the equipment and his fluid interaction with it. His dialogue suggests a sincere understanding and deep connection with these inanimate objects and this alternative virtual world. Although it is not through human interaction, but through the technological, the gaming system enables and evokes an although somewhat confusing, positive emotive affect in him. He "loves" the experience when action and thought are in synchronicity and the resulting synergy is experienced in a heightened physical sensation (adrenalin rush) through this medium.

It is worth considering that M is a professional gamer and technology has been a dominant and significant aspect in his life and relationships since early childhood. This positive association and the meaning it has given to his life has possibly liberated him to engage on a level with the gaming system that is shared only with the master of any trade or profession who has invested years of time and energy into their passion and acquired an understanding and mastery of their tools.

5.6. Section A. Summary

For all participants the gaming process was described as mostly enjoyable, positive and intense. With practice they gained the knowledge and the skills to both physically and mentally engage in the interactive virtual realm in a way that they found to be inspiring, challenging, fun and creative. Gaming is a multi-faceted activity as shown in the super-ordinate and related sub-themes and categories.

As Section A has shown, playing online computer games requires the resources, finances, dedication and time to do so. Gaming can be a personally meaningful experience offering relaxation and fun as well as being used as a means for escapism. Two participants engage in pre-gaming rituals which influences their gaming process, whilst for others, it was interpersonal competition that motivated play. For these participants their mastery and finely tuned relationship with the equipment took precedence and impacted on their game play. For all participants, the genre and content of the game was relevant. Personal characteristics were noticeable through gaming style prior to, during and after the gaming process.

A category that emerged in the narratives was that of aggression and violence in gaming and the associated stigmatization of gamers. The ways in which participants spoke about it differed as did the importance they placed on understanding it more deeply. Due to the practical limitations of this thesis these results will not be discussed but this area is worthy of further investigation.

This section has explored participants' experiences and the meanings of these experiences both prior to and during game play. We look now to the social networks that hold the gaming community together and how these are interpreted, understood and lived by the participants.

5.7. Section B. The social experience and meaning of gaming online

Superordinate Theme	Sub-themes
A gamers way	Relationships in and out the game Online multiple identities Online codes of conduct

The participants in this study, are, through this new entertainment medium afforded the opportunity to explore, develop, create or abandon relationships with other gamers and/or with themselves both online and offline. As will be revealed through extracts from the interviews, the avatars or characters representing the participants online have different meanings and levels of attachment for each participant. It is these personal and often multiple relationships that are referred to when it is said that the gamer has a relationship with him or herself in this study.

As the research process progressed, it became apparent that the depth of experience and range of meanings in relationships both in and out the games were complex and multi-faceted for the participants. Aside from needing to have the resources, mastery and skill to play a game, many online games require the gamer to become emotionally invested in the gaming community.

The attitudes and perceptions towards gaming and gamers, of society, the community, the family, peers, strangers, friends and foe, are all a part of the gamer's social fabric. They have the power to influence and shape the gamer's self-perception and identity. These relationships are shown in the transcripts to be interwoven and comprised of both virtual and physical world experiences.

We continue to explore the gamers way of self-expression, both on and offline, as it emerged in the participants' interviews and the analysis. Categorization occurs in gaming online allowing for differentiation to occur and order to be created. Norms, values and mores shape and guide the participant's experiences. "Unspoken codes of conduct" is a phrase used by a

participant to describe their interpretation of the underlying hierarchical social order in the virtual world. Participants both challenged and adhered to these systems.

Section B will now present the analysis under the superordinate theme; a gamers way, and the related sub-themes; relationships in and out the game, online multiple identities and online codes of conduct.

5.7.1. A gamers way

Superordinate Theme	Sub-themes
A gamers way	Relationships in and out the game Online multiple identities Online codes of conduct

Linking this theme with Heideggarian philosophy discussed in the literature review and methodology chapters of this study, we can consider who we understand our selves to be, how we physically present ourselves, our behaviours, how we “carry” ourselves through life and in our interactions with others and our environment, all combine to describe a way of *being- in- the-world*, be it on - or offline.

The analysis that follows presents the superordinate theme, a gamers way, and highlights extracts showing shared and unique aspects of the multi-faceted experience of gaming online. This can be seen within and across cases as the sub-themes are teased apart.

5.7.1.1. Relationships in and out the game

During the research process, the myth of the reclusive, socially inept nerd playing computer games alone in his room, was shattered. This is captured in T’s words: “I’m always aware that there are other people playing...” All participants spoke of relationships with friends, family and other gamers that bridged the digital divide with the physical world. The following interview excerpts illustrate this and how close relationships for the participants have gaming as the glue that binds their bond whilst also providing a leisure activity that is shared and enjoyed together:

M: Literally I went over to my friend's house and us and six others, who have been friends through gaming for about eight years, we just sat around and I wouldn't say partied, that's not the right word to say what we were doing, but we sat around, enjoyed ourselves, talked, ate and played games. Yeah, we just hung out for a while and it was nice (Interview 3. p. 15, # 459-465).

G: Uh, I dunno, we're addicted to it (laugh). We are, like we're in this like Quake like relationship almost, cause there's no-one else who plays it but we love the game so much (Interview 1, p. 5, # 109-111).

T: ...now, well always, when my boyfriend and I get together we just talk and talk about games and suddenly I'm like, wait a second, I haven't seen you in days, let's talk about how we feel and stuff like that (Interview 2, p. 3, # 73-76).

A gaming community that is proactive, offers fun and friendship, and the opportunity to explore and develop the self of the gamer, both on and off-line, was articulated. All participants spoke of having post-gaming discussions continuing when logged out. Meetings in local pubs or homes, with friends and fellow gamers, support the gamer and gaming culture in the mainstream. The online possibilities in gaming and social networking allow the opportunity to continue this and expand on it through connecting virtually with those not physically present or geographically available. It was interesting to note that G was the only participant who had not embraced the virtual online gaming community. Although sharing a tight gaming connection with friends in the physical world, he explained how for him the other characters gaming online are "just names" and that he was "not keen to know who they are in real life", describing them as "single serving friends".

All participants, except for G, had become members of communities, guilds and clans online at some stage of their gaming career. The virtual groups portrayed by the participants mirror the social and political issues of communities and societies in the physical world. Dynamics and dilemma's centuries old, of interpersonal relationships and group structures, continue to be expressed online in this postmodern domain. F describes an experience with a friend that has left him distancing himself from his clan as he "finds this elitist stuff" to be "really annoying". This incident has resulted in him considering "leaving the clan and going to join another one":

Researcher: Could you tell me a bit more about your clan?

F: Well, our clan is very small as far as clans go, there are clans that'll let anyone in and have about 500 members, our clan specifically only has about 300 members and of those I would say about 60 to 120 are regularly active. Of those 120 about 20 to 30 are of the *inner circle*, they play every night and they are always playing together. The thing is with raids is that there's limited space so you'll often find, and it's happened to myself and P, cause we weren't there from the beginning of the clan, so the people who were there from the beginning all end up on a raid together. If there is an extra space one of us can maybe join in, but for the most part they'll take people who have been there longer. As a result *we tend to feel that we are part of an outer circle*, which is fair enough, technically we weren't there when it all started but it can lead to feelings of betrayal and what not.

Researcher: And have you experienced those feelings?

F: Uhm, not personally but I've experienced them via my friend P, like he was very upset when they didn't include him and he was one of the most useful members in the WOW team and I was upset on his behalf that they would just cut him out like that, because I know they like him, but then they'll include this one guy B, he is basically useless, but they included him because he is part of that inner circle, even though P is a far better player.

Researcher: So did you have a loyalty to P?

F: Yah, because P is my best friend so I felt a loyalty to him as opposed to B who I'd never met (Interview 4, p. 11, # 388-409).

The above extract reflects through the participant's understanding and interpretation of his clan's behaviour, his values of loyalty and commitment in friendship. All participants unanimously found gaming to be a platform where new and meaningful friendships often began. Many of these friendships then expanded beyond the gaming domain as can be seen in M's case.

M: Yeah, it's good. You get attached to a lot of those people. Some of my best friends I've met through online gaming (Interview 3, p. 7. # 214-215).

This close bond of friendship is reiterated in the words of F who categorizes gamers and identifies them, and indirectly himself, with other sub cultures. The underlying dynamics of a sense of belonging and shared identity based on common principles is reflected:

F: Uhm, well I suppose for me specifically I value my friendships and you'll find that a lot in gamers. Gamers are very, it's almost the same with Heavy Metal Rockers and whatnot, you create a very tight group (Interview 4. p. 3. # 97-101).

Two participants, T and F, make sense of the value gaming relationships have for them. We are able to read how this allows them to explore issues of validation, aspects of their personalities and a feeling of acceptance and belonging with the group of like-minded gamers. Personal validation can occur through the virtual during game play with social validation being experienced both in and out of the game.

F: I mean everyone is looking for validation, especially when you're in a game world...you'll get role-players and they're looking for validation and they all want to help. You'll find there are people who want to help you and they'll find validation that way, and they'll be nice, they won't want any reward, they'll feel nice for helping the person. Uhm, I enjoy that myself, if I'm in a position I'll help someone within the game, uhm, because I like to be helped myself if I need to, so uhm, it depends, it is actually about validation in the end, you want to be accepted by your other peers in the game (Interview 4, p. 8, # 310-321).

T: The thing is once you have a community of geeks, a community of gamers, you know you don't really care about validation from the rest of the world ,cause you have friends and you're all interested in the same things. It's pretty much like anything in life, you know I don't care that people look down on me for being a nerd because I have a whole bunch of other nerds to hang out with, you just have to find your group. Everybody needs social validation, right, and you get that from people who are just like you (Interview 2, p. 24, # 782-789).

5.7.1.2. Online multiple identities

The participants represented themselves digitally in a range of ways. A sense of agency is played out in choosing an avatar or character to represent oneself in the virtual playground. Depending on the game, the participants are able to explore roles, engage in gender swapping and challenge their curiosity, imagination and creativity on multiple levels. G reflects on a character he played and his experience of gender swapping:

G: Although an interesting story actually, you'll like this, is in Diablo 1, I had a character called Z and that was so much fun because it was a woman character. I enjoyed, like online, talking to people in a kind of almost sassy way, like it was just funny, so I got into that character (Interview 1, p. 7. # 166 – 170).

For G, gender swapping online was a light hearted, “enlightening” experience that offered him the opportunity to express himself in a “sassy” way which would generally be considered inappropriate for him to do in the physical world. The virtual provided him the space to act out a female role, resulting in self-awareness and growth during a formative

phase of his development. It is of interest to note that aside from the character Z, he has only ever had one other character, a male, K.

G: You can get into a character I suppose, but then K was just fine, first person shooter, and that's become for every game and that's just me really, I don't try to be anyone else (Interview 1, p. 8. # 175-177)

In contrast, M has several characters. Although he has a character that he plays more often than others, he states that he usually prefers and picks small female characters for their speed and agility. Gender swapping enabled him to have choice in his style of game play and had no stigmatization attached.

Being someone else online can imply many things. All the participants played as someone or something other than themselves whilst gaming online. For G this is what made gaming fun, the pretence and freedom experienced through that. Although the participants may create their characters to have no physical resemblance to themselves, it is worth noting how all felt that some part of themselves, aspects of their identity, was revealed through their character or avatar. F shared an interesting perception which expands our understanding of what the characters may mean for a gamer. The following extract shows an extension and playfulness with self-identity, morals and norms, through the development of the character online. As dialogue continues a sense of being comfortable within himself as his character is communicated:

F: I know a lot of my friends tend to identify with them, they build characters after themselves. One of my friends has a gnome warlock on WOW and he's modelled it after himself to a very distinct degree, he's even gone so far as to name it after himself backward, so he's taken his name, reversed it and named his character after that.

Researcher: And for you personally?

F: Basically I did the same thing; I didn't realize it till after I had created my character. I took a human paladin and I gave it a beard and a very Viking name and only afterwards did I realize well I have Viking ancestry, I have a beard, uhm, paladin is, the way paladin acts is the way I act in real life. It's what I'm comfortable with.

Researcher: Could you explain that a bit more?

F: Well what I've seen a lot, even in Dungeons and Dragons, any game that involves a roleplaying aspect, where you create your own character, you put

yourself into them, you really do. Even when you take a character that's nothing like you, for example, I'm naturally a good person but if I played an evil character I would still at the very least model them physically after me, I would put myself into the character to some degree. Some people, they go and create monsters and whatnot, and it's very difficult to try and relate those two people, but you'll find that even if they physically alter everything they want to, there will be some relation, it'll either be there clothing or specific weapons their monster likes or the way they interact with other people in the game. There will be other monsters but yeah, there will be something of themselves somewhere (Interview 4, p. 6, # 219-240).

Looking across cases, the following extract from T's interview, shows the freedom gaming allows to explore the shadow aspects of the personality and to challenge the values and principles one is governed by and adheres to in the mainstream, physical world. This is echoed loudly when we discuss online codes of conduct, a sub-theme to follow.

T: I can make the conscious decision that I'm going to be as evil as I want to, it's just a game. I did that in Fallout 3, I had one character that was super good, one character that made the decisions that I would basically make, and one character that was flat out evil.

Researcher: Okay, and which character did you prefer playing as?

T: Ugh, you know, I preferred playing as the one who would make the decisions that I would, „cause I like to do that and then see how the game progresses (Interview 2, p. 8, # 260-268).

From the above extract, we can observe that T experiences the gaming space as providing a safe platform to test behaviours and attitudes. Potential outcomes can be experienced in the virtual without necessarily the same repercussions that there may be in real life.

5.7.1.3. Online codes of conduct

A gaming sub-culture enmeshed in, to use the words of G, “unwritten codes of conduct” appears evident as participants have discussed issues of identity, roles, acceptance and a sense of belonging in the gaming community. The time and emotional investment committed to the game highlights the meaning and value of gaming for all participants. To immerse oneself in this world it is necessary to become familiar with its abstract symbolic languages.

A gaming discourse that is witty, jocular and fast has evolved. The speed of the conversation and how one expresses oneself through type can impact on relationships and how one is perceived by other gamers. Status and skill go hand in hand, both in game play and chat

during play. A culture of learning is associated with gaming which was raised by participants. M communicated how type enabled him to predict his opponent's moves, which he emphasized as being important in his gaming experience:

M: You can't substitute human players for computers, there's no comparison. It's just infinitely better, they learn from you, you learn from them, they change their type, you have to try and predict them but you can't, yah, it's a much better, better experience (Interview 3, p. 7, # 207-209).

All participants used gaming discourse during their interviews. G, particularly spoke of the use of acronyms, rudeness, swearing and sexual talk that is acceptable during chat whilst gaming and an important dimension to the gaming experience. This theme also came through in T's transcript as she described how her normal conversation became peppered with slang, often making conversation unintelligible for others who were not familiar with gaming discourse. Dialogue can be both supportive or as G described, a "bantering" to "psyche out" the opponent and create tension which is exciting in the game, with the aim to break the opponent down psychologically. This had been experienced by T, who would "get hurt by them yelling", until she understood the gaming culture and the dynamics of anonymity online that she had entered into:

T: I used to take it really personally: "You stupid fucking newb, get back, you're dying", like and then one day I realized, oh my god, I'm playing it all wrong. Then I got a bit better at playing and a bit more confident in my playing decisions and now I also realized that it's the internet, they're not being mean to me because they know me and think I'm a horrible person, now I just laugh it off. "You died, you fucker, you should've gone back" and now I'm like, ah, "I'm sorry, I'm high man" (laugh) (Interview 2, p. 5, # 136-155).

Anonymity online was spoken about by all participants. It provided the platform to explore their curiosity with gender swapping; the freedom to express themselves uninhibitedly and to challenge the values, norms and mores that usually guided their conduct in the physical world. How one behaves in the virtual is entirely up to the individual and guided by their way of being a gamer online. Although there are supposedly no expectations from others as to how or what one presents of oneself online, it can be noted, that the participants experienced their conduct to be guided by self-censorship and a learnt „unspoken“ code of conduct often monitored by others online.

The gamer not only has the freedom to explore their identity anonymously, they are also able to create as many different identities as they wish to explore online, anonymously or not. Reflecting on his identity and online personality, M reveals the subtle dimensions of self-expression that gaming online offered him:

M: My identity outside the gaming world is very rarely shaped by my identity inside. People are often surprised that I'm not too outspoken in real life that I'm quite quiet usually, whereas in games it's a lot easier to be open and to talk more.

Researcher: Did that come out when you met your friends who you'd met online?

M: The weird thing is that there's this conflict between my personality and my gaming personality and I think my gaming personality is ideally what I'd like to be in certain situations, I'd like to be outgoing, I'd like to be talkative, I'd like to be liked by everyone, who wouldn't want that, but when you meet new people who aren't used to you in a normal social circumstance, you combine the two. You combine characteristics of your online persona with your real persona. I've gotten to know people and eventually your real personality is going to come out, but I think that inside of everyone, there is honesty in both personalities; it's just expressed very differently. The internet and the anonymous nature of games really helps to let you just say what you want (Interview 3, pp. 18 -20, # 552- 625).

Participants are also challenged personally during gameplay. Feedback is a critical aspect of gaming and how one handles this is revealing since anonymity online appears to encourage an uninhibited, often harsh manner. Although anonymity supposedly allows for complete freedom, underlying expectations of the individual are still present in the virtual domain as in the physical world. This etiquette and expected standard of behaviour online whilst gaming was reflected on by G. The power of the group in enforcing a "code of conduct" amongst its members can be seen and G seems to feel himself supported by the group in this situation:

G: I did get chirped the other day, but everyone decided that guy was being a prick so that's what it comes down to. You can tell when they've stepped over the line, there is definitely a kind of *code of conduct* in a way, but it's unwritten, it just is so people just get along, because they just want to play a game (Interview 1, p. 13 # 304 -307).

A second participant, M, presented a slightly different position showing how non-compliance in a team game can result in an unpleasant gaming experience for the other members. One's behaviour can thus be seen to have a direct impact on the experience of others and the opportunity for success in the game.

M: What isn't so nice is in games which force team play and you have somebody not complying, you're at an extreme, extreme disadvantage and the rest of the team suffers because of them and it makes the experience quite unpleasant. There's a lot of that as well (Interview 3, p. 11, # 306-310).

The consequences and repercussions for transgressing in the gaming domain may result in alienation and banning. Considering what has been discussed thus far in this sub-theme, G's experience shows the levels of power operating online and within the team he was gaming with. As he relates his perceptions of game chat he describes the gamers of a particular game and how he perceives their level of maturity through their chat:

G: Sometimes in Dota games they're [other gamers] not so positive and it's like they're, I dunno, like little kids or something, I don't know what else to put it down to, you should see the way they sometimes chat. It's like, like last night I was having a bad game and someone like typed that and started getting so pissy, pissy, pissy and finally quit and we could have won the game and he's actually banned now. There are all these weird chirps and they banned him, I found out he was banned and that's just his style (Interview 1, p.2, # 36-43).

Chat can thus be seen to be a gameplay strategy which can be used to impact on the individual and team morale. Issues of social dynamics, power and rivalry are evident across cases in this research. The non-compliance of "unspoken" behavioural expectations has consequences as in the above participants account. On the other hand, team work, collaboration, camaraderie, leadership and the willingness to learn from others are key issues that were also revealed in the analysis. A sense of belonging and having something worthwhile to contribute to the team is shown in M's sense of responsibility to the group.

M: You each have your roles to play, and if you don't play them you can let the rest of your team down (Interview 3, p. 12, # 310).

An example of the continuity of the fluid friendships that develop from gaming and then seamlessly weave their way into becoming an integral part of the participants' lives concludes this chapter and the analysis of this research. This extract from M's transcript provides a reflection on gaming, his friendships and the opportunities this new form of entertainment media has allowed him "in and out" the game:

M: ...we are all part of a guild; you must be familiar with what that means...

Researcher: ...yeah, yeah...

M: ...well, we're all part of this same guild and we all went on the same quests together, grinded our characters up together, and we were all relatively invested in it. I got to know that circle of friends, there was a whole bunch of us from Canada, two were from South Africa, a lot were from North America and Mexico. And I went overseas to Canada and I went to Ontario to visit these people and I got on like a house on fire with them. I've met some really fantastic people.

Researcher: And when you went online, if you think of that circle of friends, how did you establish those relationships? How did you build them up?

M: Yeah, it's a combination of relying on them as team mates or opponents, and when you rely on people as teammates it helps a lot, well, it either helps or hinders depending on their performance or yours. Yeah, you get a sense of camaraderie from working with other people. I had a very big group, there was an online game I used to play about, it must have been ten years ago, a game called Natural Selection, funny name actually. But uhm, there was a big South African community. Initially when I came on, and joined I was very bad at the game, I didn't know anything or the people and it was intimidating, but the more I got used to it, and got to know the people as well, it changed. I joined the largest group in South Africa and we actually met up and practiced for tournaments and played across the country and played an international game. Some of my closest friends came from there.

Researcher: So you say that in a lot of those relationships you've met up, so what could say was the bonding?

M: A large part of the introduction to them was through gaming, but most of my developments in friendship was outside of the game, that's how I got to know them as good friends...

Researcher: And outside of the game is it about the game?

M: Initially yeah, but not so much afterwards. Like since then we've all moved on from that game, it's too out dated now, and I'm still friends with a lot of them (Interview 3, pp. 7 – 8, # 222-253).

5.8. Section B. Summary

The superordinate theme that emerged in this section was; a gamer's way, which, together with the respective sub-themes was presented in tabulated form. The sub-themes were: relationships „in and out“ the game; multiple identities and codes of conduct online. Results of this section challenged the stereotype of gamers as loners and “anti-social nerds - it definitely did not apply to the participants of this research. The popularity of online gaming and the possibilities of social networking have enabled meaningful and diverse global communities to develop around gaming and in the game. Game participation and being a member of a gaming community requires both an emotional and a time investment and is understood to impact on the participants' sense of self and relationships both in the virtual and everyday world. The virtual playground emerged as a space offering participants the

opportunity to develop meaningful relationships with other gamers and find self validation within the group. This transferred out of the game as relationships had started, or continued to develop in the everyday world.

Findings in this study showed participants had explored their identities through the creation of and gaming through their avatars. This relied initially on their imagination, creativity, understanding and interpretation of the symbolic language of gaming and the related gaming culture as well as learning the gaming system. The anonymity of the internet allowed for exploratory behaviour to be engaged in and was perceived by participants as enabling and encouraging an uninhibited way of behaving and „being“ online. “Unspoken codes of conduct” was a term used by a participant to describe the underlying etiquette that guided gaming online.

A gaming discourse is evolving that is dynamic and specific to the gaming context. Virtual conversations occur before, during and after a game, with participants describing post-gaming discussions and feedback on and offline as an important aspect of gaming. Online games provided the space for the participants to explore and experience roles of leadership and support, collaboration and camaraderie, as well as the struggles and challenges of power, position and politics.

A discursive analysis of the data has been presented in this section, with the “voices of the participants” used as far as possible to illuminate the themes. The analysis shows briefly, in relevant areas, how the researcher arrived at these categories.

CHAPTER 6

DISCUSSION

6.1. Introduction

This chapter will link and relate the findings of this study to the literature presented. As has been mentioned in the results chapter, some themes have not, to the researcher's knowledge, been associated with the topic under study before, and it is these that function as indicators to gaps in the literature. Their inclusion contributes to the development of theory within this field.

This analysis identified four superordinate themes within participant's experiences of gaming online, namely: Intention, pre-gaming rituals, gaming process, and a gamers way. The discussion that follows is an interpretative account of the themes with references made to the results and to the literature review. Methodologically IPA was a good fit with the research aims and in exploring the phenomenon of flow. This supports the view of Eatough and Smith (2008) and Reid, Flowers and Larkin (2005) that IPA is an appropriate method to use in research in the paradigm of positive psychology, within which the theory of flow is located.

6.2. Section A. The experience and meaning of gaming online

In this thesis I have decided not to align myself specifically to a particular model of flow. As has been shown in the literature review, there are ambiguities and discrepancies in flow models and how flow is measured. In keeping with the qualitative research paradigm I have opted rather for an exploratory approach. This way of conducting research has allowed the participants' experiences and voices a platform for expression. It can be noted how semi-structured interviewing offered the participants the opportunity to express themselves freely and to speak of issues pertinent to their experiences of gaming.

6.2.1. Intention

The theme of intention refers to a conscious striving towards an end state or some goal. Our intentions can be seen to drive our experiences, to motivate our choices. The participants discussed a number of factors that revealed their intentions for gaming. Results of a study looking at gamers' motivation by Yee (2006) are supported as participants in this research also chose games for different reasons which could be grouped under Yee's main

components, being: achievement, social and immersion. For M it was the advancement, mechanics and competition of gaming, whilst for T it can be seen to be the discovery, role-playing, customization and escapism of gaming that appealed to her. For all participants aspects of socializing, relationships and teamwork had meaning with different consequences. This finding supports the conclusive link found between game enjoyment and a gamers' engagement in the game made by Chen, Duh, Puah and Lam (2006). They suggest that engagement is determined by social interaction, an area that shall be discussed in section B.

Gaming as an autotelic leisure activity suggests that this freely chosen play time, which occurs in the virtual context, has the potential to impact positively on the individuals' state of consciousness and quality of psychic experience in the physical world. The results of this study suggest that the participants do experience flow whilst gaming online. This will be addressed as results are presented throughout the discussion.

6.2.1.1. Fun, relaxation and escapism

Things matter to us in a certain way through our moods, Crowell (2005) explains that when we are happy and having fun we are "warmly attuned to things as a whole" and will thus find particular things pleasing. The participants in the current study all expressed an intention for gaming as that of having fun with it often resulting in an optimal experience. Fun was the word used emphatically and repeatedly to describe the compelling drive behind being a gamer and gaming online. This was of course linked to other appealing aspects of gaming which emerged and found expression through the themes to be explored.

As discussed in the literature review, Csikszentmihalyi (2002) observed that individuals induce a state of relaxation by choosing low challenge activities for which they have high skill. Gaming is a platform that provides plenty of opportunities to do just that. It is up to the gamer as to how challenging they want their game play to be. T, who often gamed to forget about her worries and to relax, reflected a gaming style that was motivated by the outcome of relaxation through gaming, rather than the individual challenges of skill and mastery which strongly motivated the male participants. At these times it is highly unlikely that she is experiencing flow, but rather a distraction from stress.

Escapism, “removing oneself”, from the physical world through absorption and engagement with the virtual, was reported by participants as a need being met through online gaming. Immersion in the virtual playground allows for a loss of self-consciousness to occur. Participants all reported using gaming as an opportunity to “step out” of their everyday physical reality. Returning to the theory we can note a characteristic of flow being a loss of self-consciousness which results in a sense of absorption (Brown, 2006; Chen, Wigand, & Nilan, 2008; Csikszentmihalyi, 1993; Jegers, 2007; Sweetster & Wyeth, 2005; Voikounsky, mitina, & Avetisova, 2004; Wong, 2006).

The focus and concentration on the present moment required in gaming online, seems to shift the participants awareness away from the self, offering an alternative experience to that of their physical reality. These elements of the characteristics of flow are discussed by Snyder and Lopez (2007) who state that the absorption, persistence in, and the returning to an activity, are what provide intrinsic rewards.

6.2.1.2. Mastery and challenge

The male participants of this study as mentioned above were motivated to game as the experience provided them with challenges to improve their skill and mastery in the virtual domain with a sense of satisfaction and enjoyment. Occurring simultaneously are the participants personal challenges and goals to improve their game play and the challenges and goals of inter-personal competition in the game.

Understanding the multidimensional aspects involved in gaming skilfully as an individual and as part of a team, was discussed by the participants, who reflected on how mastery is acquired through interpretation, understanding and practice. This result is consistent with theory. Flynt (2006) suggested that the gamer is interpreting the game as they interact with it. The immediate results of their activity will have bearing on their experience of the game.

A dimension of the flow construct is having a sense of control of one’s actions. Personal skills and capacity for action are balanced between and suited to the challenges and opportunities offered for action (Csikszentmihalyi, 1993; Novak & Hoffman, 2007; Snyder & Lopez, 2007). Challenges and skills have been central concepts in flow theory and dominated much of the early research and models formulated. Both G and M showed strong

self confidence in their gaming abilities as they described how knowledge and skill acquisition had come from years of engagement and involvement with gaming. This learning curve to gaming is noted by Hoffman and Novak (2007, p. 18) who state that "skill acquisition and the seeking out of new challenges is a dynamic process which evolves over long periods of time in developing mastery in a virtual world". Understanding the gaming domain, learning the gaming system and having experienced flow in gaming, would enable the gamer to identify distinct goals and objectives to both game enjoyably and successfully. As Snyder and Lopez (2007) point out, it is not so much that one has the skills that one believes one has. If there is clarity as to what is expected of one in the game and one feels equal to the task then through building upon optimal experiences so opportunities for action will be sought out that are more complex and challenging. The gaming context supports early research on flow which identified that the individual must be challenged adequately to encourage playful and exploratory behaviours (Csikszentmihalyi, 1975). Considering the unlimited possibilities to do so which are available in gaming online, as described by the participants, these behaviours can be seen to be enhanced, supported and encouraged in the virtual.

6.2.2. Pre-gaming rituals

The theme of pre-gaming rituals is interesting as it highlights how participants identify and create a physical space for gaming and engage in certain behaviours prior to gameplay. As these activities are significant for the participants and repeated each gaming session they have been described as rituals. This theme has, as far as the researcher is aware, not been discussed as an antecedent or characteristic of flow. Considering the debates about the antecedents, constructs of and outcomes of flow (Hoffman & Novak, 2007; Sanchez, Gallego, Soriay, & Aborg, 2008; Weibel, Wissmath, Habegger, Steiner, & Groner 2008), it is included as a possible stage leading to flow.

6.2.2.1. Marijuana

This sub-theme was included as not only did it appear to be an unexplored topic, a gap in the literature, but it also introduced a dimension to the participants' experience of flow that is interesting to debate. How and whether or not the use of marijuana, prior to gameplay, influences the experiences that capture the characteristics of flow as described in the literature needs to be addressed. It is worth considering such issues as how entering the

virtual world with a drug induced altered state of consciousness hinders or helps experiencing the flow phenomenon. Does smoking marijuana invalidate the flow experience or encourage us to consider another dimension to the phenomenon that is reached through psychoactive drugs? Marijuana use results in time distortion, we can question if this is accentuated during gaming or the reason why these participants experience time as altered? Further research is encouraged in this area. In discussing this finding with the participants during feedback, it emerged that although not all of them smoked marijuana and gamed, all knew of gamers who did so.

Csikszentmihalyi (1975), Pilke (2004), and Webster, Trevino and Ryan (1993) all argue that if an experience is not challenging enough it will result in a sense of boredom. For G, both gaming and „getting stoned“ were ways of overcoming the boredom he experienced in his life. His social and academic life had lost meaning for him whilst gaming provided him with a platform to “escape” from his everyday world, feel good about himself (“I’m good at it”), and experience a loss of sense of time (“it definitely like, does wipe out time”), all of which are accentuated when he is high. Research by Wan and Chiou (2006) is supported by this case as they suggested that some players game a lot as the temporary flow experience of game play alleviates their dissatisfaction with everyday life. Murphy’s (2007) findings are supported as gaming is seen as a vehicle for transporting the gamer into the virtual where goals are perceived as attainable and feelings of self-efficacy are experienced.

Although no participants claimed to be addicted to marijuana all used the term addiction, to, at some stage, refer to their relationship with gaming. Two participants described times when they felt „addicted“ to gaming or to specific games, another expressed his families concern over his gaming, perceiving him at the time as being „addicted“. Intensive gameplay has often been seen as an addiction to gaming. Studies by Wan and Chiou (2006) found that adolescents addicted to online games attempted to recreate the flow experience to avoid and neglect the issues in their lives that caused their unhappiness. Yee (2006) found avoidance from real problems and escapism from real life issues to be motivating factors for immersion in gaming.

According to Csikszentmihalyi (2006) there are two dangers of flow: Firstly, focusing exclusively on one set of challenges, like gaming, may stunt development and result in a

sense of exhaustion and helplessness in the gamer. Two participants had described a period when gaming had become destructive and a “problem”. During an episode of depression T had spent time gaming and smoking marijuana as a way of avoiding her problems and described this as “bad”. In having addressed her issues through professional assistance she felt she was now able to both smoke marijuana and game in a way that neither became all consuming. This supports the findings of Yee (2006) and Murphy (2007) that a motivation for gaming is the avoidance of real life problems.

It should be noted that many games require hours and hours of time and emotional investment, which Flynt (2006) states, shapes the way the player perceives reality and negotiates their experience and meaning of it. We can question if the skills and experiences accumulated online have meaning outside of the virtual and if they are integrated into the consciousness and the everyday reality of the gamer? Through repetition of experience we automatically slot into ways of behaving and responding to stimuli, situations and others. Considering how much time is spent engaged in the virtual by many gamers, we can question if their way of behaving online will become a „natural behavioural response“ offline? Perhaps it is too soon to tell? We can bear this issue in mind later, however, when the sub-theme of „online codes of conduct“ is discussed. Research of this topic, together with exploring the influence and impact of gaming and smoking marijuana on the everyday experience of gamers, is encouraged.

6.2.2.2. Gaming space

The equipment required for gaming demands a designated space. This space was referred to by a participant as her “gaming space”, it was as though when she physically entered this space she had crossed over an invisible boundary which allowed her to feel safe, de-stress, “forget her every day worries” and focus on the task at hand, gaming. Another participant described how he felt he had a “kind of tick” to always arrange his gaming space and the equipment in a specific way prior to gaming. Gaming can be interpreted to be of value for him as he recognized the significance of having a space that offered a “sense of comfort, to grow and experience in certain circumstances”. Feeling comfortable in his gaming space allows opportunities through gaming for actualization.

This leads us to question if a designated gaming space with positive associations can enable the transition of consciousness into the flow state to happen more quickly or often? If we are at ease in our environment then we are freed up to focus our attention on our goals more completely than if we are distracted by the physical world. This complete absorption in the moment is a characteristic of flow, so the elimination of physical distractions could be seen to support the likelihood of experiencing flow. As presented in the literature review, when flow occurs, there is an exclusion of irrelevant stimuli and the frustrations and concerns of everyday life resulting in absorption (Brown, 2006; Chen, Wigand, & Nilan, 2006; Csikszentmihalyi, 1993; Jegers, 2007; Novak & Hoffman, 2007; Sanchez, Gallego, Soriay, & Aborg, 2008; Snyder & Lopez, 2007; Sweetser & Wyeth, 2005; Voiskounsky, Mitina, & Avetisova, 2004; Wong, 2006).

This characteristic of flow links to the theory of presence as presented in the literature review. Our internal and external states are differentiated through a sense of presence. Botella, Banos and Alcaniz (2007) explain that this gives the individual agency to suppress stimuli from the physical environment to focus on the virtual. Riva, Mantovini and Gaggioli (2004) state that high presence, which would involve a high response and peak experience, may result in the optimal experience, flow. They explain that the experience of virtual reality can be perceived as modifying all three layers of consciousness when presence is experienced. The presence experienced in the real world can compete with presence in the virtual. Waterworth (2003) explains how breaks in presence results from the rapid shifts of presence between the two worlds. Interruptions and distractions from either world require the gamer to choose which to respond to (Riva, 2005). To experience flow whilst gaming online requires total absorption in the virtual and a loss of sense of self in the physical.

The meaning of a gaming space is a finding that suggests that in a computer mediated environment all aspects of this context should be taken into consideration when assessing what contributes to or is a possible antecedent of the flow experience. With resources a gamer is able to design and set up gaming systems that will match his gaming style and pocket. Financial considerations are significant as technology in South Africa does not come cheap. The result that a gaming space is important for the experience of gaming for some participants also raises the issues of the ergonomics of gaming and how one's environment can impact on one's experiences and ultimately who one becomes. This discussion now takes

us further into the participants' experiences whilst gaming under the superordinate theme of the gaming process.

6.2.3. The gaming process

Byron, Curran and Mc Carthy (2006), as highlighted in the literature review, described the virtual playground as powerful, influential, dynamic, interactive and immediate, offering a range of experiences. It offers the opportunity to become absorbed in an intense and dramatic experience that engages the senses and challenges the intellect and moral stance of the individual. The participants described their experiences of the games they had played very colourfully. During the interview F changed his voice to suite his description of his avatar and enacted the antics his avatar had engaged in when playing WOW. G responded physically whilst recalling a gaming experience saying "you're just always thinking how much more intense...I get quite worked up just thinking about it" (Interview 1). The subthemes of time, cognitive processes and embodiment will be explored taking us through the multi-dimensional meanings gaming has for the participants. As we link this with the theory and literature we are able to consider how the results have both supported extant literature on flow, presence and virtual reality and encourage further studies from the phenomenological position. Looking at the gaming process on a philosophical level allows us to interpret the participants' description of their gaming process through a Heideggerian lens.

6.2.3.1. Time

Attitudes towards and the use of computers is a field of research that has often been explored through the theory of flow (Artz, 1996; Chen, Wigard, & Nilan, 2008; Finneran & Zhang, 2002; Hoffman & Novak, 2007; Jegers, 2007; Wan & Chiou, 2006; Wong, 2006). Considering the extreme hours millions of people invest in gaming online this study now presents the subtheme of time, a complex and interesting finding. It emerged several times in the participants' conversations and also relates back to the subthemes of fun, escapism and marijuana. Some participants spoke of time as something independent and external that gaming could impact on, "wipe out". It was also discussed as something that had to be managed. Failure to do so could result in addiction and neglect of other commitments, relationships and responsibilities.

Online games are persistent and appealing with access to this virtual playground and its many different genre games and communities easily becoming a distraction and escape from everyday life (Murphy, 2007). Turkle (1995) suggests that this new playground, cyberspace, is where our desires find form, it is likely then, that its appeal could be overwhelming and unmanageable, especially if it offers a perceived “better” reality to that being experienced in the everyday world.

Spending time in the virtual means time spent away from the physical, one’s everyday life. How often, when, and the duration of game play are relevant areas to explore. Intensive game play results in hours and hours of time in the virtual which can result in a collapse of the gamer’s everyday life. Because one is not attending to the issues of this world does not imply that they disappear. The problems remain and can escalate if they are not addressed. This research supports Shields (2003) view that cyberspace impacts on everyday life as has been shown in the participants’ narratives. This impact can have positive or negative consequences.

Snyder and Lopez (2007) identify game design factors as being time and energy intensive. They suggest that intrinsic reward is experienced through absorption, persistence in and returning to an activity or game. The strategy described by Riva, Castelnova and Mantovini (2006) as the „transformation of flow” enables us to observe how returning to an activity, in this context, allows participants to build upon optimal experiences and seek out challenges and opportunities for action that are more and more complex. The experience of the game reflects the match between the level of challenge in the game and the skills of the gamer. The results of this study show that time needs to be allocated for game play, training and practice. This significant learning curve to gaming was noted by Hofman and Novak (2007) when discussing the long period of time it takes to develop mastery in the virtual world. The social and emotional commitments, bonds and responsibilities of online gaming require a major personal investment of time and will be discussed under the superordinate theme, a gamers way.

This study continues to support the literature (Csikszentmihalyi, 1975) as the participants’ experience of time whilst gaming reflected a characteristic of flow, time distortion. In this theory, time distortion is where time seems to stand still, and hours seem to pass by in

minutes. For G, “time flies” when he is gaming. In flow not only does one forget the passage of time but also loses track of oneself (Snyder & Lopez, 2007). The complete involvement and immersion in the game, for participants in this study, resulted in an altered sense of time duration. M described a time when gaming with friends and how they did not realize how much time had passed, “we were just so into it that we just sat down and played, constantly, constantly, constantly, constantly, until four in the morning” (Interview 3). His repetitive use of the word „constantly“ emphasizes the intensity of their engagement with the game. It suggests that there were no breaks in the time spent gaming resulting in a surprise at the time when they stopped. This shows a lack of awareness of time passing while they were gaming. Time can therefore be seen to be an experienced phenomenon.

In the study at hand, we have been able to explore the sub-theme of time as multi-faceted. It is significant both on and off-line for the participants and their experience of gaming.

6.2.3.2. Cognitive processes

Intrinsic interest accompanied by the use of the imagination and the experience of cognitive arousal and enjoyment is seen to be characteristic of the flow phenomenon within computer interactions (Webster, Trevino, & Ryan, 1993). Having explored the motivations that drive the participants to game in this chapter, we look to the use of the imagination as the first requirement for experiencing the virtual (Lauria, 1997). Wright (2008) explains how the virtual world is co-created with gaming not only providing entertainment but also the opportunity for meaningful and creative self-expression for the gamer. Supporting the literature, a participant in this study said it was being able to pretend in a game that made the experience fun. Their imagination has a platform on which to unfold. The anonymity of the internet will be shown later as encouraging this unfolding in an uninhibited, exploratory way of being online. As described in the results chapter, cognitive skills include but are not limited to; thinking, planning, interpreting, organizing, problem solving and decision making, as well as, creativity. Waterworth (2003) states that information that is dealt with through imagining, planning and thinking, involves us exercising extended consciousness.

Considering these cognitive processes operating whilst gaming, it is interesting to note that the participants all described their best experience of gaming as when it is happening “without thinking”, when their reactions are like “second nature”. A participant described it

as comparable with muscular memory. She explains it as “when you’ve hit that point in the game when the learning curve is over, you’re not thinking up, down, left, right, your hands just do it” (Interview 2). All these descriptions show the participants were not consciously aware of the skills they were using. A characteristic of flow is the merging of action and awareness (Csikszentmihalyi, 1975). The participants all echoed the feeling of complete involvement in gaming during which time their awareness of their social role in the everyday world disappeared. Supporting theory (Brown, 2006; Chen, Wigand, & Nilan, 2006; Csikszentmihalyi, 1993; Jegers, 2007; Novak & Hoffman, 2007; Sanchez, Gallego, Soriay, & Aborg, 2008; Snyder & Lopez, 2007; Sweetser & Wyeth, 2005; Voiskounsky, Mitina, & Avetisova, 2004; Wong, 2006) this research shows that in concentrating and focusing exclusively on the present moment in the virtual, if the gamer believes they have the necessary skills to reach their goals, if there is a sense of potential, they will have a sense of control of their actions and know how to respond effortlessly in this context.

For the majority of participants their expectation in gaming supported research; that it was played primarily for fun (Humphrey’s, 2003) and to “engage in achievement-oriented activity”, at high levels, “often in collaboration with other gamers” (Galarneau & Zibit, 2008.). The literature review provided a brief synopsis of the different genre games that can be played online. Most of the participants above thrived on playing intense fast paced first person shooters. Two participants found the story line or possibility to generate one in a game as important and determining their emotional attachment and time investment in the game. Real-time action together with the above described cognitive skills locates the gamer in the virtual playground and they respond to the game “as if it were real”. This experience has been defined as the phenomenon of presence (IJsselsteijn, 2002) and will be explored under the sub-theme embodiment.

6.2.3.3. Embodiment

Van Ommen (2009) states that the relationship between the body and contemporary technologies troubles the distinction between body and environment that he describes as temporarily “smudged” and bringing “the ethical nature of being-in-the-world into renewed focus”. The results of this research support this view and it shall be shown to emerge through linking the participants’ experiences and meanings with the theoretical and philosophical framework presented.

The current study showed that, across cases, participants spoke of an embodied gaming experience. This calls the boundaries between the virtual and physical into consideration. For M, gaming offered rare moments to experience an incredible amount of fun that was very exciting and an adrenaline rush. G described his experience of playing Quake as his physical body responding as if what was happening to his virtual body was happening to it. His body language dramatically expressed what he was explaining: "...if someone rails you, *pewch*, you do this..." (*physically reacts and crouches body forward*). This participant spoke of having physical reactions whilst gaming several times during the interview: "my heart breaks out", "I get quite worked up just thinking about it" and "...just excited, breaking into a little sweat..." For him, the high level of intensity and involvement required to game at an optimal level, resulted in direct, strong physical reactions experienced in the everyday world. It appeared that in recalling the gaming experience his body responded as if it were *there* (in the gaming world) showing how for this participant the gaming process can be understood to be experienced on an exciting and intensely physiological level. This result supports the theory of presence, and the concept of *telepresence*, as when the participant allocates his attention to the virtual environment, he thinks, feels and behaves as if the place were real and the events depicted as happening (Biocca, 1997; Botella, Banos, & Alcaniz, 2008).

As technology and the gaming system continues to evolve so it has become user friendly and accessible. Studies by Hsu and Lu (2003), Sanchez-Franco (2006) as well as Skadberg and Kimmel (2004), found an antecedent to flow being perceived ease of use of web based activities (as cited in Hoffman & Novak, 2007). Gallaway (2004, p. 11) explains that it is in the act of doing, of actively controlling and manipulating the controls that "imbricates the gamer with the game". According to Chen, Wigand and Nilan (2008, p. 2), the flow state is experienced online when "navigation is characterized by a seamless sequence of response facilitated by machine interactivity and accompanied by a loss of sense of self-consciousness". A participant captured the impact of using the equipment on his experience when he explains "you wouldn't think that from moving your hand and mouse around that you can be tired afterwards...you invest a lot of concentration into trying to do something, it's quite taxing" (Interview 3). Penny (2004) discussed how on one level playing a FPS, like Quake (a game many participants, especially M and G played), can improve hand-eye coordination at the computer console and on another level, be effective in training skills that require rapid and reflexive behaviour such as marksmanship. He explains the interaction of

the gamer with the formation of the games representations is entwined in bodily behaviour, making these “images more than images”. Penny (2004) calls for research into embodied interaction in gaming and questions what behaviours are trained in the games as with real training simulators, the behaviour trained results in the players becoming excellent marksmen. We can question if this is any different with FPS gaming experience? This area is worthy of further research.

A participant in this study, M, revealed a fascinating area for further exploration, this being his relationship with the equipment. He explained the meaning it has for him using language that usually would be reserved for relationships between people not with inanimate objects. The interpretation that follows draws on Heideggerian philosophy in trying to make sense of the participants’ experience. As indicated in the literature review, for Heidegger, technology did not make sense if it was treated in isolation. The objects and our experiences of the objects, in this context, the gaming system and mechanics, are inseparable and revealed through *dasein*, our way of being-in-the-world. As discussed in the methodology chapter, the lived context or world within which things are encountered is the source of meaning. It is the task of *dasein* to interpret the meaning and how we make sense of ourselves and the world (Conroy, 2003; Lavery, 2003, Sheehan, 2008).

M, described his experience of gaming with the equipment as being able to “lose himself” with the distinction between his hands and the equipment disappearing, “it’s all part of the same experience”. Achievement of his goals results in an adrenaline rush which he understands as feeding the experience and sharpening his cognitive skills such as prediction, during the game. The physical body is always responding to the virtual when engaged with it, with many games requiring acute sensory perception to achieve mastery. An example of this is expressed in the participant’s extract as he explains, like T, how initially one is constantly thinking about the game moves whilst playing. With experience the body “naturally” responds to the audio-cues in the virtual and manipulates the controls accordingly “without thinking”. “Being at one with the gaming system” had great value for M. His reflection reveals his relationship with technology, which although he finds “surprising”, “odd” and “weird”, discloses itself with the machine as something he “loves”, “understands so well” and “connects so much with”. Heidegger’s lens enables us to see and attempt to understand the experience of online gaming, for this participant, as an intimately connected, multi-

dimensional life-world that “is part of, and not separate from, our already always and embodied life world” (Vieta, 2004, p. 2).

Finneran and Zhang (2002) introduced a model to better understand flow in HCI. They acknowledge that flow is experienced by a person in both the context of the task as well as the artefact used. These three components: Person, Artifact and Task (PAT) are distinct in their model which suggests that in separating the task from the artifact, researchers may be able to explore factors influencing flow from different aspects. Pace (2006) reinforced the view that flow experiences for web user’s be understood through the user’s holistic experience with technology which can be seen to be represented in the above case of M and his experience of gaming and the meaning technology has for him.

6.3. Section B. The social experience and meaning of gaming online

Online gaming occurs in a context that is a constantly expanding interactive virtual social space (Downes, 2005). Gackenbach and von Stackelberg (2007) observe that the world of digital games has been transformed through the possibility of communication via the internet and the interactivity this supports. In cyberspace gaming communities have evolved and developed. Gamers experience what Downes (2005) refers to as the “death of distance”, as they join online with individuals from around the globe in real time regardless of their geographical location. Participants in the current study had gamed with both strangers and friends, of all ages, races, genders and creeds from different countries and continents. Some strangers had become friends both on and offline, other gamers were “single-serving friends” interacted with only in the virtual and there were some who had embraced the online gaming community through their experience of friendship and validation with the gaming community in the everyday world.

Turkle (1995) explains how interdependence is built into the games with participation and enjoyment of the game requiring personal relationships and being a part of the community. Relationships develop and interactions play out between gamers in the virtual through a social network that supports and is co-created by the members. Findings in this study support this as participants discussed how many online games required an emotional investment and time to understand the many facets of the game with much of this learning coming from practice and learning from others. Gaming was described as a “culture of learning”, this

finding supporting Hoffman and Novak (2007). As gaming communities are being created on the net so we are able to observe theory manifesting in a virtual world. Symbolic interactionism (Garson, 2006; Smith & Osborn, 2007) with its concern with how meaning is constructed both personally and socially, through a process of social engagement and interpretation can be applied in our understanding of this context. Through the development of gaming communities, guilds and clans, gamers become involved and active participants in constructing their online social world. Meaning emerges from community experience and negotiated order exists in the virtual as in the everyday world. A complex symbolic system has evolved in gaming as can be observed in the development of a gaming discourse that is constantly being created and was discussed by all participants. Through language meaning is negotiated. Post- gaming discussions which provide feedback occur both online and offline. As we work our way through this section of the discussion so these topics will arise again and be discussed relating them to their relevant theme.

A participant explained that built in chat rooms in the game or forums provided the space to gather and discuss skills, strategies, plans and other issues sometimes not related to the game. In this online “room” relationships develop. As mentioned previously in the results of this study, only one participant had not joined an online clan or gaming community referring to his experience as “community wise, it’s always just been different individuals that I sit down to play with at that moment”. He talks of being in an offline “Quake like relationship” with his close friend and flat mate with whom he games constantly. He consciously maintained a boundary between himself and others online due to his childhood socialization and parents disapproval of computers seeing gaming as “anti-social”, yet he established a meaningful friendship with someone he refers to as “a gamer, gamer” and embraces the activity of gaming as something meaningful in his life that he regularly engages in.

The sample of this study reflected the families of the participants as having interesting and diverse perceptions towards technology which influenced their (the participants’) perception and experience of it. In contrast with the case above, M’s family embraced and supported the use of technology and his involvement with gaming. Although he questioned whether he was “outgrowing” gaming, he never the less showed a positive disposition towards technology and a professional’s understanding and interpretation and use of the medium. It was completely integrated into his life and relationships both on and offline. Another participant,

F, expressed how his family had shown concern with his usage and the content of the games he was playing, particularly after the media highlighted a death resulting from excessive gaming. He stopped playing that particular game. Sharing T's perception, he did emphasize that it was the gamer and not the game that was to blame! Drawing on Heideggerian thought the above cases show that how we read, interpret, and translate something depends on "what shore we stand on or whether we have any shore to stand on" (Sluga, 2005, p. 118).

Social disapproval, stigma's and stereotypes associated with gaming was discussed by M who felt that "people just assume you're an introvert", and "everyone assumes that if you're a gamer you're never going to have a girlfriend, that you are subconsciously or consciously a very violent person cause you're always playing violent video games". These stereotypes were challenged by the participants and will be explored under the themes to follow.

6.3.1. A gamers way

Returning to Heideggerian philosophy we can make sense of the participants' experiences and interactions with the virtual and their understandings of themselves as gamers both on and offline. The gamers way refers to a *way of being-in-the-world* which in this study applies both to the virtual and physical worlds. For Heidegger our being-in-the-world always emerges in an interdependence and reciprocity with other beings which can be expressed authentically, in-authentically or in an undifferentiated mode (Conroy, 2003). The networks that develop in gaming become virtual environments for relationships with other gamers to develop, and for the gamer to gain a worldview and understanding of the world and themselves from the perspective of their community (Steinkuehler, 2004). Participants discussed hierarchical structures and complex dynamics operating in the games they played and communities they belonged to. They also discussed taking on avatar roles and identities that developed social bonds and connections with other avatars. These results support research by Humphreys (2003) and Hertz (2002) that social relationships and emotional commitments sustain the games and have meaning for the gamers.

It is hoped that this discussion will highlight what came forth in the analysis, that the gamers way is socially interactive, erasing the boundary between the virtual and everyday worlds. Participants have shared their experiences showing how friends and gaming go hand in hand with complex social and personal dynamics experienced. The results of this study support

findings from Schmidt, Shernoff and Csikszentmihalyi (2007), that the interactional nature of flow can be observed in the interplay between the environment and the individual. They suggest that both internal and external dimensions of experience exert an independent influence on flow.

6.3.1.1. Relationships in and out the game

“I’m always aware there are other people playing”. These words capture T’s experience of online gaming. IJsselsteijn, de Ridder, Freeman and Avons (2008) defined the feeling of communicating and being with others in a mediated virtual environment as *co-presence*. Heeter (1992) spoke of *social presence* and how we find evidence of the virtual world as existing through experiencing others as also existing in that world. Later in the interview the above participant spoke of how she preferred knowing the gamers she was playing with as this gave her a “sense of what they’re doing” implying that she was aware of them and could read into their online behaviour due to knowing them offline. Participants M and G also discussed how knowing the gamers often made for a better game. These participants shared an awareness of the person behind the avatar whilst gaming, yet during the intensity of a game related to the avatar itself from the position of their avatar.

The results of this study showed all participants finding gaming to be a platform where new friendships began and others were expressed in a fun way though this interactive medium. Friends took on avatar roles and gamed with or against each other, individually or in a team whilst in the virtual, and offline continued to develop their relationships meaningfully. The sentiment expressed by a participant was: “You get attached to a lot of those people. Some of my best friends I’ve met through online gaming”. F generalized that everyone in a game world is looking for validation, the opportunity to help others [and feel good] and for acceptance by one’s peers in the game. This finding supports Yee’s (2006) results that helping others is a social component of player motivation.

Flynt (2006) states that on a cultural level we understand the world according to the medium we have selected. This shapes and refines our understanding of ourselves, our interpersonal relationships and the communities we belong to. The above participant, F, valued his friendships and felt this quality was shared with other gamers as well as heavy metal rockers. Identifying himself as a gamer, and gaming as a sub culture, suggests that the participant may

experience himself as „different“ from mainstream society, finding a sense of belonging within the gaming community, both on and offline. This shapes his self-perception and offers validation and understanding of his friendships, most of which revolve around gaming.

Dynamics within the gaming community mirror the power and politics of the everyday world. In this study a participant explained a dilemma he had confronted with showing how alienation and rejection within the group may also occur online. He interpreted his clan as being elitist and comprised of an inner-circle made up of members who had initiated the clan, and an outer circle, late comers or gamers who are not as active. After his friend, both in-and-out the game, was passed over for a weaker gamer in a raid, both members felt a sense of betrayal, frustration and unfairness in the clan. The participants loyalty to his friend had resulted in him considering leaving the clan and finding another to join. We can observe, as stated by Galarneau and Zibit (2008), that the “rich universe of social interactions and culture ultimately become the core of gameplay, rather than the periphery”.

Gaming friendships and groups offer personal and social validation and continue to develop outside of the gaming domain. They are meaningful and can be intimate. A participant explained how belonging to a “community of geeks” or “nerds”, and having these like-minded friends with whom she socializes with allows her to experience a sense of group identity and togetherness. It is interesting to note that her boyfriend is also a gamer and they live with fellow gamers. Csikszentmihalyi (1997) states that it is through the investment of psychic energy in goals shared with others that we are part of a family, in a friendship or invested in the broader community. He advised in 1990 that it is in the company of friends that we can learn who we really are and most clearly experience freedom of the self. Considering how some participants discussed the game “continuing” after playing through post-gaming discussion and when socializing with friends, this sense of identity and shared purpose as gamers can be seen to be reinforced through a support system and community of gaming friends both in and out the game.

Flow, according to Csikszentmihalyi (2006), can be experienced in relationships and friendships. These become meaningful and enjoyable when there is trust, unconditional acceptance, emotional security and open communication. Friendships are chosen on the basis of commonality and shared or complementary goals. A sense of community is developed,

according to Wright (2008), through the gamer interacting with advanced simulated characters, worlds and storylines. To the researchers knowledge there have not been studies considering flow and autotelic relationships in gaming, suggesting a gap in extant literature. This research is thus deemed relevant as it explores social relationships and social networking as experienced in online gaming, recognising the subjectivities involved to be meaningful and worthy of study.

6.3.1.2. Online multiple identities

Online relationships have fewer social context cues such as intonations, gestures, facial expressions, or demographic information available compared with relationships in the everyday world. It is up to the individual which traits and characteristics they choose their avatar to possess, how they project these and how they respond to others avatars. The participants all spoke of identifying with others whilst gaming, a finding supporting results by Kim (2009) that others are identified with who share similar characteristics in cyberspace, even if their virtual representations do not resemble their physical appearance. In the results the participants of this study represented themselves digitally in a range of ways showing a sense of agency, exploratory behaviour, creativity and an interest in exploring roles and even gender swapping. The identities the participants created depended on the game genre and the role they had chosen to play at the time.

The participants had engaged in exploration with their online identity and all played as someone or something other than who they were in the physical, although for some they felt that there would always be something of themselves somewhere in the character. Resemblances between the virtual and physical expression of self was reflected on by a participant who recognized his avatar as being very like himself in the physical. F explained how after reflection he had become aware that his choice of the avatar's name showed a connection with his ancestry in the everyday world. The behaviour of his avatar he felt mirrored the choices he would make in the real world, "it's what I'm comfortable with". This was echoed by T who reflected on playing three different characters in a game; the first character made the choices she would, another was "flat out evil" and a third was "super good". She states, "I preferred playing the one who would make the decisions that I would, cause I like to do that and then see how the game progresses". The meanings that the participants have ascribed to their experiences of gaming as their avatar, supports that the

individuals' identity embodies multiplicity and Suler's (2002) and Turkles' (1995) view that cyberspace functions as a new medium for self-construction where we unconsciously reflect images of ourselves. Shields (1997) and Nusselder (2006) explain that the screen is like a mirror in which the individual seeks and gains self-identity. The self-images or avatars that are created reflect back aspects of the gamer as has been noted in F's description of his experience of an avatar he had created.

G had explored only two identities online in gaming. The one character was a female. He perceived gender swapping and playing this character as fun, it had been an enjoyable way to communicate with others in a way that would have been „out of character“ in his everyday relations. He indicated that he “got into that character” through the enjoyment he experienced whilst playing her. Taylor (2003), states that it is necessary for the gamer to identify themselves sufficiently with the avatar to fully respond to and participate in the game. Swapping gender online is an option that allowed the participant to transcend the limitations and stereotypes of his everyday world to, in a light hearted way, discover aspects of himself that may not otherwise find expression. Bartle (1990) suggests that in online gaming the emotional hold is rooted in the gamer's ability to project themselves onto their avatar.

M often gender swaps creating small female avatars that have speed and agility. This he feels enables him to game with a character that reflects his gaming style. Gaming can be seen as a platform and providing a safe space to test attitudes and behaviours without necessarily the same repercussions that may result in the everyday world. The anonymity of the internet allowed participants to present who and what they liked, whichever way they pleased. This brings us to our final subtheme; online codes of conduct.

6.3.1.3. Online codes of conduct

As defined earlier in the study, co-presence refers to the feeling of being with others in the virtual world (IJsselstein, de Ridder, Freeman, & Avons, 2008). Sanchez-Vives and Slater (2007) explain how even though one is cognitively aware that the virtual and what occurs there is “fictitious”, one responds unconsciously and consciously as if it were real. Consistent with the literature, the participants described the interactions they had experienced in online gaming as having value and meaning and experienced as being very *real*. Interactions and relationships between gamers could be either a positive or unpleasant experience. A

participant described “unwritten codes of conduct” guiding online gaming behaviour and interactions.

According to Conroy (2003), the social context we exist through is a world of shared understandings and meanings. Blumer’s theory as discussed in the methodology chapter enables us to understand that meanings and symbols emerge from community experience and human interactions. This results in negotiated order being defined and expressed as the norms, rules and expectations of the community. This process appears to be occurring in online gaming communities which are self-organized and co-created by the members. Galarneau and Zibit (2008) identified skills such as negotiation, collaboration and self-marketing as well as an understanding and awareness of the subtleties of etiquette operating within these virtual environments as part of the process of self-grouping. To experience immersion in this world, as with any other, it is necessary to become fluent with the symbolic language attached to it and the accepted codes of conduct.

Most communication online occurs through text. As the results of this study consolidated so it became evident that a gaming discourse is evolving online through text and transferred to the everyday world through conversation. A gaming vocabulary is being created with participants in this study, during their interviews, illustrating T’s point that her normal conversation became “peppered” with slang. All used gaming discourse during their interviews. The use of acronyms and sexual metaphors, swearing and a rude attitude was described as the norm of chat whilst gaming. A participant also experienced this as an important dimension to his gaming experience. This way of communicating is perceived as socially acceptable online, yet in the everyday world it excludes those who are not gamers and transgresses the norms of „polite“ discourse in an often offensive way.

Understanding the nuances and subtleties of any language is challenging and bound in our cultural framework. In gaming, some words from the everyday are imported into the virtual and take on different meanings or implications whilst others evolve that have never existed before. Flynt (2006) explained how active participation and interpretation in the game is necessary for the culture of the game to merge with one’s own culture. This is done by understanding the underlying logic communicated in the images of the games. The meanings which emerge then assist in understanding the culture of the game, as previously stated, “the game is interpreted as it is interacted with”. Recalling Heidegger’s position of *being-in-the-*

world, we are reminded that it is the world in lived context within which things are encountered that is the source of meaning.

The results of this study showed that communication through text which happens before, during and after a game, as significant in contributing towards creating and developing the culture of the game and the value of the gaming community. Gaming is not just about playing the game; participants invested a tremendous amount of time and energy to learn to become fluent, fluid and fast in expressing themselves during chat in it. A participant described gaming discourse to be witty and jocular. The English language is thus continuing to develop and transform in a virtual world.

Status and skill are determined not only in the game but also during chat as the speed at which and how one expresses oneself through text could impact on relationships and how one is perceived by others. Dialogue between gamers can be supportive and encouraging or as described by a participant, a “bantering”, to “psyche out” opponents. Using language as a psychological tool to emotionally impact on the individual and hence his game play was a tactic used by G, who explained how this kept the tension in the game. Another participant described how she, until she understood the gaming culture, game and dynamics of anonymity online, would feel hurt and take the rudeness of the comments personally and as a judgment of her personality. Feedback is a vital aspect to gaming with anonymity often encouraging harsh uninhibited criticism. A participant’s expectations of the internet condoned behaviour otherwise deemed irrefutable and offensive in their everyday world. The anonymity the internet offers and the freedom of self-expression and how one’s conduct is enacted in the virtual playground is up to the individual and their interpretation of being a gamer online.

The group dynamic of gaming online enables many roles to be enacted. As in the everyday world, a participant’s experience revealed how this is mirrored in the virtual. Issues of transgressing gaming „etiquette“ and the expected standard of behaviour resulted in the group deciding to ban a gamer for being “pissy”. There are consequences and repercussions for one’s choices of action even in the virtual. Having a „bad“ game, rivalry and power struggles can all impact on individual and team morale. Also revealed in the analysis, however, is the opportunity for collaboration, teamwork and camaraderie to be experienced. Findings showed participants feeling a sense of belonging and of having something of value to

contribute to the team and for some, to their gaming community. The experience was based on a sense of sharing and reciprocity.

Considering that the games are played with strangers and friends around the world in real time, it is likely that, as Kim (2009, p. 4) suggested, “sharing the same self-representation in cyberspace allows people from diverse social and ethnic backgrounds to get over their differences, identify with one another, and even interact with one another without much prejudice”. This view is supported by Frasca (2004) who is of the opinion that playing simulation games may lead to the gamers developing a tolerant attitude toward others. According to Murphy (2007, p. 24), “if the game play experience is perceived as a social event that resulted in co-operation and the attainment of group goals, the player might learn skills such as teamwork and communication rather than learn to be aggressive and hostile, despite the presence of aggressive thoughts”.

Cskiszentmihalyi (2006) used soldiers experiencing flow in war conditions which required the defeat of another, as an example highlighting a danger associated with flow. Boredom may be experienced when those conditions change and it is up to the individual to determine their ethical stance in selecting flow activities to engage in. First person shooters, war and strategy games were all popular choices for the participants. All required the participant, individually or as part of a team, to engage in combat situations with the goal being to defeat the opponent. This is often graphically very violent with realistic images on the screen. All participants spoke of the violence and aggression in gaming, with M showing that he had contemplated and been confronted with challenging ethical and moral issues in the virtual playground.

M spoke in depth of his experience of playing violent games. He described them as enjoyable and as satisfying an “urge inside yourself to get it [violence] out of the way”. As he continued to reflect on the topic he recalled situations of self-censorship and leaving the game when the violence became too disturbing. His civic morals and values emerged when confronted with a scene of his friend shooting innocent civilians in a game. His friend’s behaviour he found unacceptable, even if in a game, and described how it “triggered” something within as these positions he felt, “can strike a nerve”. This finding challenges the dominant issue in psychological literature that playing violent games encourages hostile and aggressive behaviour in the gamer. As another participant in the study stated, “guns don’t kill

people, people kill people” and that “games are not bad things, it all depends on how you are”. These participants challenged the stereotype of gamers being violent individuals.

The findings support Frasca (2004) who suggested that a tolerant attitude may be developed through the interpersonal dynamics of online gaming. As discussed above, a participant spoke of experiencing “a sense of camaraderie from working with other people” and how he had found it “fulfilling” to game in a team of people he liked that were proficient. A sense of loyalty and responsibility to the team is evident as he states; “you each have your roles to play, and if you don’t play them you can let the rest of your team down”. Considering the value of interacting with others and the learning culture online this participant claimed: “My most enjoyable and my most unpleasant [gaming experiences] are because of human opponents”.

As discussed in the literature review Csikszentmihalyi (2000) identified five characteristics of flow in relationships; clarity, centring, choice, commitment and challenge. In applying this theory to the results of this study, we can consider the following:

1. *Clarity*: Participants knew what was expected of them in their gaming relationships. Their role in the game was influenced by the genre of the game played, with the „personality“ of the avatar and how it related to others online reflecting choices and attitudes of the person behind the keyboard. Out the game relationships were experienced virtually in forums or chat rooms or in the everyday world socializing together. The culture of learning that is evident in gaming also assists in gaining clarity as to what is expected in their relationships as a gamer both on and offline with other gamers.
2. *Centring*: All participants showed an interest in what was occurring and being experienced in the present. This was highlighted in their reflections and the extracts showing absorption and immersion in the game whilst others are also online.
3. *Choice*: A sense of agency and exploration with the endless opportunities available in the virtual playground had enabled participants to feel that there were possibilities to choose from. This also relates to their gaming style and what behaviours they project through their avatars into their relationships online. This would include how they respond to other gamers both in the virtual and everyday worlds.

4. *Commitment*: Participants expressed feeling accepted and finding self-validation in the gaming community both on and off-line. This may suggest that they experienced a sense of trust which enabled them to set aside their “shield of defences”. Loyalty to the team and gamers as friends, as well as a sense of responsibility has been discussed, reflecting the participants’ commitment to each other as gamers and friends.
5. *Challenge*: The platform of gaming in the virtual playground inherently offers opportunities for complexity in action to manifest. The participants are required to give meaning to and find understanding in a world that is occurring simultaneously to their everyday reality. They used their imaginations and became co-creators of the virtual, allowing themselves to become immersed in this culture of simulation. Their experiences were determined by their skill and mastery of the game and gaming system and how they interacted with the other gamers. Feedback and post-gaming discussions are a critical part of the learning curve in understanding and playing the game. All this requires perseverance, practice and socialization in the gaming community. The participants all showed they were dedicated to achieving the goals they or the team had selected whilst gaming online and all had experienced personal opportunities to challenge themselves in striving to achieve these goals.

In focusing attention on the group relationship and goals, Csikszentmihalyi (1990) says the “joy of belonging to a more complex system that joins separate consciousness in a unified goal” may be experienced. It would suggest from the findings, that for some participants, this was no different in online gaming relationships.

CHAPTER SEVEN

CONCLUSION

7.1. Introduction

In this concluding chapter an overview will be provided recapping the aims, context and methodology of the study. Thereafter, a summary of the main findings are briefly discussed. Following this their implications are considered and recommendations for further research are proposed. The limitations of the study are then addressed. Finally, a reflexive statement is presented.

7.2. Overview of the study

Computer gaming has become an increasingly popular subject for psychological study with the virtual playground being an area for both positive and negative gaming experiences to be played out and researched. Csikszentmihalyi's theory of flow, grounded within the movement of positive psychology, has been theoretically linked to research across disciplines, particularly in HCI. As the prevailing body of research focuses almost exclusively on flow and the individual's experience of the gaming process, this study at hand, has attempted to do this and fill a gap by exploring social relationships and the experience of flow in online gaming. This study was deemed relevant as playing games has for centuries been an important part of human development, interaction and socialization. Considering the rapid growth and massive appeal of online games, the field is significant and worthy of study, particularly from a phenomenological position. The complex dimensions related to our being human and playing games with others in a technologically mediated environment and possibly experiencing flow, provides us with a field rich for psychological investigation.

Chapters Two and Three provided a theoretical framework for understanding the experiences of the participants in this study. They reviewed the discourses of virtual reality, gaming, and the theoretical constructs of presence and flow respectively. Through discussion of theory and consideration of research conducted, gaming online was shown to be a multifaceted experience with controversial areas worthy of further in-depth psychological research.

An IPA design was deemed the methodology best suited to meeting the needs of the research problem. This method provides a suitable set of strategies to explore and analyse the

experiences and perceptions of a small group of gamers in relation to the phenomena of presence and flow in the context of gaming online. In accordance with qualitative research, in-depth semi-structured interviews were conducted. Following Smith and Osborn's (2003) IPA method, data was analysed hermeneutically and inductively with results tabulated and presented in a discursive format.

7.3. Summary of findings

Overall, this study found that participants experienced their online gaming coming with various skills, attitudes, affects and knowledge that they found meaningful personally and in their relationships both in and out the game. Four super-ordinate themes emerged from this study, namely: (i) intention; (ii) pre-gaming rituals; (iii) gaming process; and (iv) a gamers way. The first three themes were discussed under Section A, which dealt with the experience and meaning of gaming online. Section B explored the social experience and meaning of online gaming.

The theme of intention showed that participants used gaming as an autotelic leisure activity. Their intentions to game were embedded in motivations for fun, relaxation and escapism. This supports extant literature and research that has identified various characteristics, including the above mentioned, of flow in gaming and HCI. Male participants highlighted mastery and challenge as motivating their game play. This finding was consistent with theory which also notes the time required to develop mastery through the dynamic process of seeking out new challenges and acquiring skills in the gaming domain through exploratory and playful behaviours.

The theme of pre-gaming rituals presented those experiences of participants that involved them engaging in specific, ritualized behaviour prior to gameplay. This area has not, to the researchers' knowledge, been studied in the context of the experience of flow and gaming online. A controversial topic to debate emerged as the sub-theme: marijuana. It was found that marijuana and gaming is used to experience gaming in a relaxed and absorbed way and to pass time while enjoying oneself and forgetting about every-day issues. Drug discourse was used by participants who discussed addiction, not in relation to marijuana, but to gaming. These findings supported research and linked this sub-theme with that of escapism.

The participants showed an awareness of the dangers of gaming that had come from personal experience or parental involvement and concern over their gaming habits.

A second sub-theme, gaming space, was included as some participants found meaning in having a designated gaming space. It was considered as important in assisting in crossing the boundary between the physical, everyday world and the virtual playground. It was also found to influence the experience of the gaming process. The issue was raised as to whether or not environmental factors could influence the possibility of experiencing flow whilst gaming. The concept of presence was used to explore this and related to the phenomenon of flow in the virtual domain.

The gaming process as experienced by the participants was discussed focusing on the sub-themes; time, cognitive processes and embodiment. These findings both supported literature and encourage further studies from a phenomenological position. The researcher acknowledged taking a Heideggerian position in attempting to interpret the participants' description of their gaming process. Time can be seen to be an experienced multidimensional phenomenon for the participants. Time distortion was experienced by all participants. These findings are supportive of flow theory (Csikszentmihalyi, 1975), as an altered sense of time is a main flow characteristic.

This study supports the literature (Wright, 2008) and found imagination to be the key in unlocking the gates to the virtual playground. Once inside the participants gained experience in a world rich, diverse and of their co-creation, in which to find self-expression. The opportunity to develop cognitive skills is supported by the „learning curve“ in gaming and include, but are not exhausted by; creativity, thinking, planning, interpreting, organizing, problem-solving and decision-making.

It was found that participants' experiences can be seen to support the theory of presence as they responded in the virtual games as if they were real. The blurring of the boundaries between the everyday and virtual worlds, the physical and virtual self of the gamer and the gamer and the equipment and gaming system reinforced findings of embodied interaction in earlier research (Penny, 2004).

Section B explored a gamers way, the researcher making sense of participants' lived experiences within a Heideggerian framework. The complexities and subtleties of gaming online showed social networking and the development of personal relationships and a sense of belonging in virtual gaming communities as dominant threads of the gamer's social fabric. Understanding these societies and online communities requires an unpacking of the multi-layered experiences participants presented including how others and they themselves perceived gaming dynamics and being a gamer. The sub-themes identified were: relationships in and out the game, multiple identities and codes of conduct.

The way participants described their experience of others being online simultaneously supports the construct of co-presence. Friendships were found to be „fluid“, experienced both in the virtual and everyday world with some being initiated virtually through gaming online whilst others initiated in the physical world through gaming societies and friends. Socialization into the group and understanding the group dynamics of gaming communities takes time but the rewards are a sense of self-validation, identity, belonging and the opportunity to develop meaningful friendships.

In this study, participants showed having an exploratory, playful approach towards themselves in gaming and had explored different virtual representations of themselves. The anonymity of the internet encouraged the freedom to present oneself in an uninhibited way and to experiment with alternative identities and ways of being. Regardless of the virtual manifestation, participants felt there was always something that resembled themselves in their avatars. These findings resonated strongly with the literature that cyberspace is a new-medium for self-construction with the screen as a mirror which reflects back aspects of oneself and in which one seeks for and gains self-identity.

Finally, it was found that “unspoken codes of conduct” guided the participants' behaviour and etiquette online when gaming. The symbolic structures and meanings in the gaming world had to be learnt and integrated by the gamer and this included understanding and becoming fluent in the discourse that prevailed in this domain. Chat, through text, was the dominant mode of communication online, and an area worthy of further research. Issues concerning moral and ethical choices, transgressions and situations encouraging teamwork,

collaboration and camaraderie were raised by participants showing gaming to be a multifaceted experience, not unlike that of living in the everyday world.

The five characteristics identified by Csikszentmihalyi (2000) for flow to be experienced in relationships were considered with the results of this study. This thesis ends on the encouraging note that the gamer may experience the “joy of belonging to a more complex system that joins separate consciousness in a unified goal” if they focus their attention on the group relationship and goals in their game and gaming community.

7.4. Implications of the study and recommendations for future research

Current research into the experience of flow in mediated environments has focused to a large extent on the psychological issues of addiction and violence in gaming. With the launch of social networks and rapid expansion and popularity of online gaming there is a call across disciplines to explore and study these “lived experiences” that are relevant to contemporary concerns in the wider societal context. Our use of technology is transforming our experience of being human and this study supports the body of research that is emerging showing this as impacting on our lives in both a positive and negative way.

The findings of this research supported the theory of flow and growing number of studies investigating the characteristics of flow as the phenomenon is experienced in the virtual. An example is the subtheme of mastery and challenge. They were also relevant in reinforcing and contributing to the existing knowledge, constructs and theory of virtual reality and online gaming experiences, as was noted in the discussion on the concept of presence.

The theme of pre-gaming rituals introduces findings that call for further research. These are; the gaming space and the use of marijuana prior to gameplay. To the researchers’ knowledge marijuana has not been linked to or emerged in studies on flow, gaming online or experiencing virtual reality. All participants knew of many fellow gamers who “had a bong” before gaming online. This finding is worthy of future research that may possibly offer insights into our understanding of the experience of playing with others, in virtual reality, whilst in a drug induced altered state of consciousness.

A relevant finding was the theme of embodiment. Gaming as an embodied experience and the gamers relationship with the equipment and gaming system together with the experience of the phenomenon of flow is worthy of in-depth investigation. This finding was explored from a philosophical and psychological stance and encourages a closer examination of our contemporary *„technological way of being’* in both the virtual and everyday worlds as the boundaries between these have been shown as “smudged”. This supports the literature in the field.

It is recommended that future research be conducted on the social experience of gaming online. This domain offers the opportunity to gain clues and witness the unfolding of present and future social and technological developments. Social interaction is a strong motivating factor for gamers, highlighting how important our interpersonal relationships are both on and offline. As this study progressed so the researcher realized the importance of the attachment and meaning the participants gave to their interpersonal relationships with other gamers both in and out the game. These technologically mediated friendships formed into lasting social relationships.

Social networking in gaming has been shown to include a specific symbolic structure and use of the English language that transfers both from and into the everyday world and which excludes those unfamiliar with it. Much of the discourse has a sexual tone and considering that gamers of all ages play together, research considering the effects of our sexualized society offline on online chat and relationships in gaming, is encouraged. Gaming communities have evolved and been likened to a “sub-culture” with social structures, issues and dilemma”s mirroring those in the everyday world. These findings encourage research from a multi-disciplinary approach into these topics.

It is hoped that this study may contribute to the under researched area of flow and relationships in online gaming. In considering Csikszentmihalyi”s characteristics of flow in autotelic relationships with the findings of this study, the benefits of exploring this theory further through continued research of the online virtual playground is recommended.

7.5. Limitations of the study

A limitation of the study was the challenge of dealing with the complex and broad constructs of consciousness, virtual reality and online gaming. Their complexity became apparent during the compilation of the literature review. Where possible a broad review has been offered to locate the reader in the context of the study, however, these fields are dynamic and demand to be perceived as such, with it noted that much has been presented only superficially due to the practical limits and scope of the thesis. The concepts of autotelic personalities and character strengths have not been addressed, providing fertile ground for future research on online gaming and flow.

This study may have benefited from including other forms of data collection such as observation of the participants gaming. Physiological changes could also be measured during the experience of gaming. fMRI studies could be conducted on gamers' brains with possibly fascinating results. Including these methods may add to and enrich our understanding of aspects of embodiment and the experience of flow whilst gaming online. The research design chosen for this study was most apt to meet the aims of the project but these areas would be worthy of future study.

A larger sample group may have improved the study. The sample used is appropriate for IPA and the participants offered rich and meaningful data, it is rather that women were in the minority. The sample used is possibly an accurate reflection of the ratio of male to female gamers in the virtual playground, however, female gamers are on the increase and their voice should be heard, particularly as this is a very male dominated domain. Longitudinal studies of online gamers using a small sample group or case study approach could also offer valuable insights that this study is unable to do due to its duration and compilation.

7.6. Reflexivity

My generation did not grow up with computer games, let alone computers and few of us would have imagined anything like the internet possible. How different we would be today if it had been around back then. As computers filtered into our lives, so I perceived this new technology as a useful tool. It was in years to come, through my children, that I took an interest in and involvement with computer games as a leisure activity that I perceived as having great graphics and „educational benefits“. Back then, there was much debate and

controversy about children playing computer games, yet this new technology was part of our changing world and was changing it, which somehow for me „justified“ introducing my children to the virtual playground.

The introduction of online gaming and social networking forever altered our experience of the virtual playground. It was not long before my children were technologically more advanced and active online than I was. I soon came to realize that as a parent, unless you are sitting beside your child whilst they are gaming online, you have no idea as to who they are online, whom they are interacting with, the tone of their conversations or the style of their play or whether or not, they are even „safe“. As there is no manual or guideline for the online virtual playground, the best approach seems to be to keep ourselves and our children informed, of both the wonderful possibilities available and unfortunately, as in every playground, everywhere, the potential and lurking dangers to their safety and well-being.

Research conducted for my honours degree sparked my interest in the theory of flow and online gaming. Exploring the experience of flow for adolescents in the South African context, it emerged that many youngsters were challenged by ethical and moral dilemmas they experienced whilst playing online games. This, together with reflecting on the role of gaming in my home, and being a mother of „postmodern teenagers“ who had grown up frequenting the online virtual playground and continued to do so, motivated and inspired me to jump the digital generation gap! I had absolutely no idea where I would land; all I did know was that I had a lot to learn.

The process of this study has been influenced by my theoretical orientation which determined the appropriate method to use. Taking an alternative, qualitative position, allowed me to approach this relatively uncharted field in an exploratory and open way. Aligning with the paradigm of positive psychology offered the opportunity to do research looking at positive subjective experiences. As popular media report on studies focusing almost exclusively on the negative experiences of gaming, it interested me to discover if there were any studies that investigated the positive experiences and outcomes of gaming online according to the theory of flow. I had not expected the topic I was investigating to be as overwhelming in content as it was. To be more precise, at the outset of the study I did not anticipate the theoretical complexity involved in attempting to understand the experience of flow and gaming online.

Finding my bearings both theoretically and philosophically was demanding yet a most valuable exercise, as grappling with and creating a framework which guided the study was critical in keeping it contained and manageable.

My perceptions, interpretations and what I have chosen to report on as well as my impact as a researcher on this study is hopefully adequately addressed throughout the thesis. I considered subjectivity in the process of knowledge construction in being mindful of what was selected for inclusion and of the influence of my presuppositions and decisions at all stages of the research process. An attempt was made to „back up“ themes using excerpts, quotes and phrases from the transcripts and literature, for reinforcement. It should be noted that the process of conducting the study, similarly, impacted on and influenced my experience of the research process and my interpretation and understanding of the virtual playground.

Increasing the knowledge base of the virtual playground, its culture and symbolic system as well as our experiences of these, as they unfold, is appropriate and relevant to the zeitgeist. As researchers it is our responsibility to try to interpret, define, translate and understand our youth, the worlds we are enabling them to create, the games we have given them to play and how they are experiencing this platform of expression.

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APPENDIX I

GLOSSARY OF TERMS AND ACRONYMS USED IN THIS STUDY

Autotelic: From the Greek words *autos*, meaning self, and *telos*, meaning end. Csikszentmihalyi (1997) used this word to describe a personality, activity or relationship that chooses, or is chosen, for her, his or its own sake, rather than to achieve an external goal (Snyder & Lopez, 2007).

Avatar: An electronic version or representation of an individual or gamer on screen. Used interchangeably with „*character*’.

Co-presence: The experience that others are present, together with one, sharing in the co-creation of the virtual world.

Cyberspace: The Web with its independent spatial qualities enables us to navigate our experiences and the virtual spaces in a responsive environment which we can define as cyberspace (Downes, 2005).

Dasein: A term employed by Heidegger to “describe the mode of existence of a human being” (Collinson, 1989, p.151).

Flow: “An optimal state of engagement in which a person perceives challenges to action as neither underutilizing nor overwhelming his or her existing skills and has clear, attainable goals and immediate feedback about progress” (Snyder & Lopez, 2007, p. 262).

Gamer: An individual who regularly plays computer games, particularly online games. Used interchangeably with „player”.

Gaming: The activity of playing computer games.

Game play: Describing the phenomenon of play in virtual environments. This term is used interchangeably with gaming.

Human- Computer Interaction (HCI): The study of ways of interacting with and the experiences of using computers by humans.

Ludology: Defined as the study of digital games, or more precisely, play, with major contributors researching how we understand games in our digital culture and the implications gaming has for us in our post-modern world (Moulthrop, 2004).

Presence: The experience of *being there* – in the virtual world.

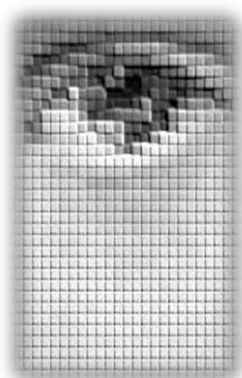
Massive multiplayer online games (MMOG's): These are games with strong social networks, which may be joined (some at a fee) and played by anyone, anywhere globally, in real time, provided they have the internet which is the platform on which they are played and the financial resources to do so.

World Wide Web (WWW): A revolutionary high speed system of networks that is constantly evolving as an interactive virtual social space occurring simultaneously and parallel to the physical world offering an alternate „life“ and „way of being“.

Virtual Reality (VR): A multi-media environment that is responsive and encourages interactivity with virtual reality and interaction with others through this technological medium.

APPENDIX II

INVITATION TO PARTICIPANTS



You're Invited..'

Hi.....

I'm conducting research for my masters by thesis in Psychology, supervised by Clifford van Ommen, exploring the phenomenon of Flow (an optimal state often referred to as "being in the zone") and on-line gaming and relationships in the virtual playground. I am interested in gaining a deeper understanding of the experience of playing on-line games. As a regular player your insights and experiences would provide an opportunity for us to gain knowledge that is needed which can authentically describe what it is like playing on-line.

All information shared during a recorded interview at the Psychology Department, that would last approximately 1hr30min, will be confidential and there will be no disclosure of your identity in any records. There may be 1 – 2 follow-up interviews which would last about 1hr each. Data will be kept in safekeeping for research purposes for five years after which time it will be shredded. Participation is voluntary and you may withdraw from the research at any time.

Your participation would be appreciated. Don't hesitate to call me should you need more information about the study or with any questions you may have.

I look forward to meeting with you.

Kind Regards,

Donnae" Godley

e-mail: g86g4086@campus.ru.ac.za

APPENDIX III

PARTICIPANT CONSENT FORM

	AGREEMENT BETWEEN STUDENT RESEARCHER AND RESEARCH PARTICIPANT. Research for Masters by Thesis in Psychology Department of Psychology, Rhodes University, P. O. Box 94, Grahamstown, 6140
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I,.....agree to participate in the research studying flow and gaming in the virtual playground, conducted by Donnae" Godley and supervised by Clifford van Ommen, at the Rhodes University Psychology Department.

I understand that:

1. The researcher is a post-graduate student of Psychology and that this study is a part of the requirement for a Master's by Thesis degree at Rhodes University.
2. The topic of interest is flow, relationships and on-line gaming in the virtual playground. The researcher is interested in personal experiences in this context.
3. My participation will involve my responding to an interview which will take approximately 90 minutes and 1 -2 follow-up interviews which will last about 60 minutes each.
4. All information is anonymous and confidentiality will be respected.
5. The questions asked will relate to my personal experience.
6. I can choose not to answer any questions or disclose personal information.
7. I am welcome to voice any concerns I have regarding my participation and these will be addressed by the researcher. I will receive feedback.
8. In choosing to participate in the study I am committing myself to complete participation unless unforeseen circumstances or concerns arise of which I presently unaware of. I may, however, withdraw at any time.
9. The thesis may contain direct quotes or information about my experiences. These will be presented in a way that my personal identity is protected and anonymous to the general reader.

Signed..... on:.....20.....
in Grahamstown.

Participant :.....

Researcher.....

Witness:.....

THANK YOU FOR YOUR PARTICIPATION

APPENDIX IV

INTERVIEW SCHEDULE

participant	
age	
sex	Male Female
faculty	
consent	
How long have you been gaming online?	A few weeks Number of months Years (how many)
How much time spent gaming weekly?	Number of hours
Specific game or genre of game played more often than others? [adventure/action/role-play/fighting/other]	Genre Favourite game

Motivation

- **What does gaming mean to you?**

Prompt: what images come to mind/ what words?

- **What makes for a good game?**

Prompt: How would you describe your experience of being in a great/good game?

- **What do you enjoy most about these games?**

Prompt: What attracts you to these games?

- **How do you feel when you are playing them?**

Prompt: physically/ emotionally/ mentally

- **As time passes in a gaming session, do you find your experience of the game changes?**

Prompt: experience of body/ self/ surroundings

- **Has gaming impacted on other areas of your life? If so, in what ways have you noticed?**

Prompt: studies/ other interests/ relationships

Identity

- **How would other people, such as your family and friends, describe you?**

Prompt: happy/ easy going/ moody/ excitable/confident/aggressive

- **Do you have multiple characters for certain games?**

Prompt: can you describe them?

- **Do you have a favourite character amongst them that you play more often?**

Prompt: Is there a particular type of character you prefer to play as?

- **How would you describe your relationship with your characters during gaming?**

Prompt: How do you feel about your characters? personally attached/ meaningless

- **How would you describe your behaviour when gaming as your character?**

Prompt: Similar to or very different from your everyday self?

- **Have you ever found that you have forgotten about yourself and felt completely immersed in your character?**

Prompt: Have you ever felt that you are your character?

- If yes, how frequently does this happen? How would you describe this experience.

Social relationships whilst gaming online

- **What is like to be in a persistent game world with other online gamers?**

Prompt: How do you feel knowing there are other gamers interacting online with you?

- **Do you often game with people/friends you already know?**

- **How would you describe your experience of these online relationships?**
Prompt: challenging/ collaborative/supportive/trusting/strategic/meaningless
- **Do these relationships vary? If so, in what way?**
- **How are these relationships similar or different to your everyday relationships, if at all?**
Prompt: Is there a difference for you?
- **Does your experience of other gamers change across a game?**
Prompt: more depth/ superficial/ no change
- **Whilst gaming do you relate and interact with the other characters or are you aware of the other person behind the keyboard. Does this change during the gaming session?**
Prompt: Is there a distinction for you?
- **Do you feel a sense of commitment or responsibility to other gamers or their characters?**
Prompt: If for some reason you cannot game or you are interrupted how do you feel?
- **Do you belong to a guild or group of gamers? If so, do you feel you share the same goals with the other gamers and do these correspond with your personal goals and in what way?**
- **How do you typically feel after a game? Does this vary with the type of game?**
- **How do you typically feel towards other gamers after a gaming session?**
- **How long does this feeling last? How does it change over time after the game?**

APPENDIX V

INTERVIEW TRANSCRIPT M.

D: So M, if you could tell me, what does gaming mean to you?

M: **Whooah...**

D: If you think of words, or images...

M: I dunno, the meaning of it has changed throughout my entire life. It used to just be something I did with my folks, my father used to... my father is also an avid gamer and we used to play for fun. But now as I've got older I've got all these terms to describe my pastime activities and I guess its escapism, that would be the appropriate term to use, but I still have an incredible amount of fun.

D: Okay...

M: It's very good stress relief...

D: Yeah, so what would make for a good game for you?

M: Urh, clever design. Yah, a game that's cleverly designed, as long as you can see there's some thought been put into it, then it's very good.

D: So what aspects about that?

M: Uh, specifically, like to do with the actual video game itself? One of the things they've screwed up the most is controls. Funnily enough you'd think it would be easy enough to get right, it's very, very crucial that you get controls which suite the game. That's the fundamental step that you have to get right.

D: So when you're playing, if you think of QUAKE for example...

M: Yah, specifically with QUAKE the physics engine they've made for that game is fantastic, it's easy enough for you to pick it up and play it, the first time you sit down. There's enough depth to it for you to play for years just trying to master it. There's always going to be someone better than you, so there's a lot of depth to it.

D; Okay, can you talk a bit more about that, what about that is attractive in it to you, what appeals to you in the game

M: Oh, well I can talk about the specific mechanics what make it so good or I can talk about why it appeals to me...

D: Yah, your personal experience...

M: My personal experience, oh my personal experience is that I just love playing against other human opponents. It's the competition of it, when you lose in a

videogame, it's frustrating. It's like losing in a sport or any form of competition, but in this, there's something about it that just drives you to get better, it just drives you to get much better at it, yeah... I enjoy improving and playing against opponents better than me.

D: ...and your experience of the game, you say you're driven to excel, to do better...

M: Yah, that's specifically with first person shooter games, it's not like that with every game, but the competitive games, especially the on-line ones are, at least that one.

D: And overall with the games that you play?

M: Some of them, like the first person shooters and all of the skilled based games are like that, but the statistics based games and role playing games, like WORLD OF WARCRAFT, that whole online game is very different and you have to have a very different mentality to get through those.

D: Okay, do you play those games?

M: I do. Not so much now that I've enlisted at university because they're extremely, extremely time consuming.

D: And what is your experience when you're playing the game? I don't know whether you'd like to speak in general or focus on a specific game?

M: Well, if you're playing against someone who's as good as you are, it's like playing a sport. It's like when you play a sport against someone who's really talented, you get an adrenaline rush. You really get an adrenaline rush, you start sweating and you're not really exerting yourself physically, but you still start getting excited. Yeah, it's nice, it's very nice.

D: Yeah...and as time passes whilst you're gaming, does your experience of the game change?

M: Yes, most definitely. Most definitely!

D: Could you talk a bit about that?

M: Uhhh....initially on picking up a game, most games, you are going to be unfamiliar with the system that they've used, because each, because of the nature of the games, they're designed by different people. They start with almost nothing so the system they design is going to be unique to the game and of course it takes quite a while to get familiar with that. When you pick it up you'll know the basics, for first person shooters you'll know how to aim, you'll know how to move, you'll have your standard control configuration tables which work best with you, but then within that there's going to be

technicalities in the game which will change the way you play. Like QUAKE 3 for example, it's got very liberal movements system, and you learn how to keep your momentum going when doing that, and you learn how to do that, but other games don't have that, they focus more on mobility, or more on controlling the map or whatever the game is designed to do. The more familiar you become with it, just the better you get.

D: And which do you enjoy the most?

M: I prefer a reality based game, so I like speed, like QUAKE 3 has, I also enjoy quick, fast-paced, gaming sessions. I don't dislike long slow games, it's just my personal preference, I would much rather go in there and be my best for one or two minutes and then have another round after that.

D: What would be being you best, what sort of feelings...?

M: Uhm, I saw in the title you said something about flow, it feels like that. You just, you...I'm trying to think of ways to express it. I was talking about it to a friend the other day, you just...it feels like the game just sort of makes sense, and you understand the mechanics and you can do things perfectly, you can do it without even thinking...it becomes second nature. So when you learn to play the game without consciously thinking about it, but reacting rather, that's, that's one of the best things.

D: Okay, and are you aware of what's going on around you when you're doing this?

M: Like things outside the videogame, nah, usually not, it's very hard to try and be aware of the world around you when you're like reading a book and it's kinda the same.

D: Your concentration...

M: It's very focused concentration.

D: Okay and in that space, what do you feel? What sorts of emotions are you experiencing?

M: I guess the simple one would be excitement, it's just exhilarating, yah, it's very fun, I really enjoy it.

D: Okay, can you tell me a bit more about your characters; do you have a specific one that you play more often?

M: I do, I do have. It's going to sound odd, but a trend in my picking of characters, I usually pick small female characters. I don't know if that means anything, but I always go for characters which have agility and speed.

D: And do you play the same character each time?

M: No, I switch every now and then. It's hard, I mean, in QUAKE there is no real characters, everyone just gets the same and you just personalize your name and that's it. But in games where there are characters I almost always prefer smaller characters.

D: And do you feel there is a separation between you and your character or do you feel...

M: Yeah, very much a big separation. But with some of the games there isn't a separation, that's because they're story driven, that would be like relating to a character in a book. You wouldn't put yourself as your games avatar, but you can relate to them, just like you can relate to certain characters in a story or something. But for me it's never that direct.

D: And the times that you have played that do you feel there are certain aspects of yourself...

M: Yeah, there must be. I'm sure there must be. Usually games where you grow any sort of attachment to your character, your avatar are role playing games. I'm sure you're familiar with how you start off as a little un-powerful weakling and you slowly build up that character and you customize him according to your own preferences and yah, with those, there is definitely. It does reflect what your playing style could be. Like I know my very best friend at home, is also an avid gamer and we both have very different attitudes towards playing a game and it reflects whenever we play against each other.

D: Could you talk a bit more about that? Like your experience with your avatar?

M: Yeah, mine are always, I always go for indirect approaches if in a game when a conversation is required, I'll always chose conversations and stuff over the fighting, whereas my other friend will always chose direct combat. Yeah, I think there is definitely some reflection of your personality in that, but only where it is possible to reflect your personality. It would be kinda hard to try and discern someone's personality from watching them play QUAKE.

D: Is there a game you can think of where it has reflected your personality?

M: Not completely, I mean there have been characters in games which have similar personalities to me, but that's just coincidental I believe.

D: Do you find in those situations that you relate more to the character?

M: Oh yeah, most definitely, most definitely. You grow more attached to, like in any story driven game, you get very attached to the characters because they share a similar thing to you, but others you just don't

D: And what does attachment mean to you?

M: Uhm, you sort of emotionally invest yourself in the character. I'm going to keep relating it to my experience with books as I treat the two in a very similar manner. There have been books which I've read, CATCH 22 for example, I related myself so completely and utterly to the main character, and his humour. Maybe I even adopted some of his traits. There's never been anything quite like that in a videogame that I've experienced, where a character speaks to me quite like that, but there are certain characteristics that you can identify with.

D: Yeah, and how do you feel about your characters, you were saying some you become attached to...

M: For the most part I try and keep myself detached from the characters but other-times, there's just something about the characters you just like, you find, like even if it's a bad character, you'll still pick it „cause there's something you like about that character. Yeah, yeah you do get attached to some of them, you get very attached to some of them, its nice though.

D: And does that attachment come outside of the game as well, do you find yourself thinking about the characters?

M: Mmmm.....not so much the character, it's very rarely associations to the character that I take away for me from the game...

D: What do you take away from the game?

M: Uhmgosh I'm not actually sure. Uhm...there's always a longing to go back to it, especially if there is challenge involved. I have an obsession; I'm going to call it an obsession, with challenge in a computer game.

D: What does challenge mean to you?

M: I just love overcoming it. Even if the game is obscenely challenging but fair, then I'll just be completely addicted. I will like, yah, I just can't stop playing. That I definitely take away with me, but I've become almost driven by it. It's a weird experience, it's hard to describe. In the back of my mind I'll be thinking about it when I'm concentrating on work or anything else....

D: So do you find it sort of impacts on your everyday life, indirectly?

M: Indirectly yah, like it's on the back of my mind a lot.

D: And when you say you feel you're addicted and quite obsessive over it, why do you say that?

M: I tend to obsess over very specific videogames, usually incredibly hard ones. Like there's a Japanese game and it's obscenely, obscenely hard and for about four years I've been trying to finish it, I still haven't, it's incredibly hard and I still play it. Just like that. I'll sit down and I'll play it over and over. (laugh)

D: You were saying that it's the challenge that appeals to you so if you imagine yourself in that space...

M: It's a combination of multiple things. You could have the most challenging game in the world being a panel moving across the screen and that's just obviously not going to appeal to me, so there's a whole bunch of combinations. There's the combination of the character, the world that they have created, the system that the game uses, if it's fun and it's challenging and it's fair, as long as it's fair, there's nothing that irritates me more than something being unfair. But if the game treats you as a equal, it gives you all the necessary tools to beat it and you still lose, now that is what gets me...and I have to, have to win!

D: And how do you find that playing out in on-line games where you're playing against other characters? Or, other people?

M: Well that's, it's like the best possible system.

D: Yeah, could we talk a bit more about that?

M: Yes, of course. Human players are, you can't substitute computers for human opponents, there's no comparison. It's just infinitely better, they learn from you, you learn from them, they change their type, you have to try and predict them but you can't, yah, it's a much better, better experience.

D: So how do you feel knowing there is someone else playing on the other side?

M: Yeah, it's good. You get attached to a lot of those people. Some of my best friends I've met through online gaming.

D: Okay, could you talk a bit more about those relationships?

M: Yeah, sure. I used to play an online MMORPG, a very obscure one called RAG AND ROCK online. I used to play it online with a bunch of my friends and we are all part of a guild, you must be familiar with what that means...

D: ...yeah, yeah...

M: ...well we're all part of this same guild and we all went on the same quests together, grinded our characters up together, and we were all relatively invested in it. I got to know that circle of friends, there was a whole bunch of us from Canada, two of us were

from South Africa, a lot were from North America and Mexico, two were from Russia. And I went overseas to Canada and I went to Ontario to visit these people and I got on like a house on fire with them. I've met some really fantastic people.

D: And when you went online, if you think of that circle of friends, how did you establish those relationships? How did you build them up?

M: Jeez, it's a combination of relying on them as team mates or opponents, and when you rely on people as teammates it helps a lot, well, it either helps or hinders a lot depending on their performance or yours, yeah, you get a sense of camaraderie from working with other people. I had a very big group, there was an online game I used to play about, oh I was still at high school, it must have been ten years ago, a game called NATURAL SELECTION, funny name actually. But uhm, there was a big South African community. Initially when I came on, and joined I was very bad at the game, I didn't know anything or the people and it was intimidating, but the more I got used to it, and got to know the people as well it changed. I joined the biggest group in South Africa and we actually met up and practiced for tournaments and played across the country and played an international game. Some of my closest friends came from there.

D: So you say that in a lot of those relationships you've met up, so what could say was the bonding?

M: A large part of the introduction to them was through gaming, but most of my developments of friendship were outside of the game, that's how I got to know them as good friends...

D: And outside of the game was it about the game?

M: Initially yeah, but not so much afterwards. Like since then we've all moved on from that game, it's too out dated now, and I'm still friends with a lot of them.

D: So they've been meaningful relationships which started in gaming?

M: And even here at Rhodes, I was talking to a friend of mine, my best friend back in Cape Town, about what gaming has done. Both me and him, we've been gaming for most of our lives, he's started losing touch with it and I haven't and we were just comparing what the differences are. I met him, not through a game, but through circumstances related to gaming and many of my friends in Grahamstown I've met through games.

D: So would you say it has a significant role in your life?

M: Yeah, it can really. It's something to relate to people with and that helps regardless.

D: And when you say you're talking about the differences like he's moved away from gaming and you've stayed with it, why do you feel you've stayed with it? What is it giving to you as a person?

M: In some sense it's given me the same sense of fulfilment as reading a book, but it's different in a way, „cause you take away with you something different when you've mastered a game as opposed to mastering a book. With a book you take away literary knowledge, you take away knowledge of the characters, with the game you take away an understanding of this little world that these people have created and the dynamics in them and you take those experiences away with you and you can apply them to other games. The more games you play, you get better overall at all games. Because I've been playing it for so long I can pick up a game which is almost completely unfamiliar to me and learn it very, very quickly, and if you enjoy games that's a very nice skill to have.

D: For sure...and when you talk about the dynamics of the game, could you elaborate on that a bit?

M: How so?

D: Well, what sorts of dynamics are happening in that game world?

M: Well, games are designed...I'm trying to think of a way to put this...games may seem very similar. It's going to be hard to differentiate between looking at two first person shooters or two role playing games, cause ultimately they're the same thing. FPS is a screen with a cross in the middle and RPG is a screen with numbers in the middle but there's a lot more subtlety to it than simply that, the perspectives may be the same, some things will be the same but others will be completely different. The way you have to think while playing it is going to be different, the way you have to move while playing it is going to be different and there is a general set of skills that you can take with you, like your accuracy with the mouse, controller and game pad. It's a good general skill to have, but most of your skill comes from learning the game system itself. You can have very good theoretical knowledge of the game, one you've probably heard of is DOTA, I used to play that a lot as well, so you can have good theoretical knowledge of the game, but with no practical skills you can't play it, and vice versa. You can have very good practical knowledge but without any theoretical knowledge you'll lose, you need a combination of both.

D: So it must take a lot of time then to develop those skills?

M: It does take long, that's why they're a very time-consuming hobby.

D: And when you're gaming, like when you're in a team, are you aware that there are other people or are they just characters?

M: You're almost always, if you're playing with other people. If you're playing by yourself it's better not to as often the images are quite disturbing if you think about them. But when you're playing with other people you have to keep that in mind, first and foremost, that there are other opponents that you have to work your way around.

D: And in a RPG, how would that work out?

M: if it's a team based role playing game then it's the same, more specifically in a rpg as you each have your roles to play, and if you don't play them you can let the rest of your team down.

D: Do you enjoy the team –based games?

M: Sometimes, it can be very, very fulfilling if you get a team together of people that you like and its proficient, but it can also be very unpleasant. My most unpleasant experiences with gaming are because of other human opponents. Like my most enjoyable and my most unpleasant are because of human opponents.

D: Could you talk a bit about them, let's start with the most enjoyable...

M: When you're, even in a non-team based games, playing against human opponents they're always learning from you, you're learning from them, it's just a very fun experience. You're constantly trying to be to improve, it's a fun challenge to try and do...the unpleasant experiences are just too numerous to go through all of them. It can range from anywhere, from people just being unpleasant online, being rude, there's a lot of that, you get used to that very quickly, and it's called trolling on the internet, when people just harass you for the sake of it. That you get used to, what isn't so nice is in games which force team play and you have somebody not complying, you're at an extreme, extreme disadvantage and the rest of the team suffers because of them and it makes the experience quite unpleasant. There's a lot of that as well. A hell of a lot of that!

D: So it seems the team you play with is quite carefully selected?

M: Yeah, it can be nice to have a team of just random people. If somebody's bad at the game, that's fine, just as long as they're willing to listen.

D: While you're in the space and gaming, does your relationship with the other gamers change over time, does that shift?

M: Yah, it definitely does. I mean for a few reasons. You know if you know them in person then you're more comfortable with them, but that isn't always such a big issue. The anonymity on the internet negates the comfort thing as you can be comfortable with them regardless of if you know them or not. But if you know them well enough that you can recognize their playing style and can predict what they're going to do, and if its team game, you'll base your actions around that and aid them, or if it's a competitive game, you'll try use their predictive actions to beat them.

D: Do you find there are a lot of players online regularly at the same time?

M: Not so much here as there is very limited internet access, so online gaming here is quite hard to do. Through the university Network there's a few active communities. Becoming friends with the people you play games with is a good survival tactic for playing the game actually, cause then if you're friends with them you can just go over to their house and like I play QUAKE 3 a lot here, and one of my good friends also plays it, and I can just walk over to him and "hey, do you wanna play QUAKE"; and there's the Rhodes DC system, DC plus where you can go on and just make requests and there'll be a game of DOTA going up and people will see and say "hey I wanna join in", and people join, so there are often people ready to play, there are a lot of people here who plays games.

D: Do you find as you've been in this world a long time, do you find there are more people playing games these days?

M: Yes, much more, much, much more. Not the games I play sadly, and to my dismay, but there are lots more people playing games. It's very much entered into the mainstream now which is not such a bad thing at all.

D: And what sort of games would you say they're playing?

M: The most popular games here at RU are, DOTA is by far the most popular, it dominates over every other game, COUNTERSTRIKE is also quite popular. This year a game LEFT FOR DEAD came out which has also been very popular and it's extremely fun to play. Yah, but games go through trends, it's very hard to predict. In my first year here we did a lot of QUAKE 3 and then I didn't touch the game for another 3 years and then this year again we picked it up. And there's a community building up.

D: And if you look at your trend in gaming?

M: My trend of gaming is like the games which are played competitively here is almost coincidental to mine. The games I would love to play competitively no one seems to play.

D: Which games are those?

M: Uh, there's a new game which came out, a new street fighter game, I absolutely love them, and here no-one plays it at all. No-one!

D: And if you get into that space now, that fighting game, could you explain your experience whilst you're playing?

M: Yeah, the fighting games are very different to all other kinds of games ,cause the management of time is different, you only have 60 seconds, or 90 seconds, or whatever it is, in one round, so it's like short bursts. Like a tennis game, except your strength doesn't get lost at the end of each round. So unlike a sport you're not exhausted after the fifth round, you're just as ready to play each round. The speed of those games is just so much more, its very intense, it fun. And there's a lot of technical skill required as well. There's the combination of managing your ability to do the in play moves combined with your knowledge of the game and the knowledge of the opponent.

D: And when you're playing are you aware of your body?

M: After a while. Initially very much so because it's a battle with the controllers, if you're not used to them or unfamiliar so you're very aware of the physical aspect of the game. The better you get, the less aware you are of it because it becomes second nature, you just think in a certain situation, I have to do this, and your body just follows naturally.

D: So would you say that with your experience of it, the mouse and the keyboard is an extension...

M: Yah, it's just an extension.

D: Really, so there's no separation between you and the equipment?

M: None whatsoever. If you get used to driving a car you don't think about the wheel or pedals, it's just you moving your arms in this motion and the car follows suite, it's exactly like that.

D: And if you think physically, while we're looking at the body, whilst you're playing and enjoying the challenge and it's intense, what are you feeling, what are you going through?

M: It's very exciting. It's an adrenaline rush in a situation in gaming you're your victory is unasured, when you might win or might lose and your actions determine that.

So it's very, very fun, incredibly fun! It's one of the reasons I still play games today, it's those rare moments.

D: And how does that leave you feeling afterwards?

M: Uh, satisfied I guess, but wanting more, almost always. Either that, or, sometimes it's so intense you just have to take a break. I can't deal with that again for half an hour or an hour.

D: What is the intensity of it?

M: It just requires a lot of concentration, like a heck of a lot of concentration. You wouldn't think that from moving your hand and mouse around that you can be tired afterwards, but you get surprisingly tired and lose focus afterwards, can't concentrate as well, because you invest a lot of concentration into trying to do something, it's quite taxing.

D: So do you find you are very in the moment, completely focused and concentrating on that specific task?

M: Yeah...

D: And how long does that feeling last?

M: Usually the duration of the game, and for a while afterwards, like I'll want to talk about it, go over it. It's not long lasting, it's temporary.

D: And who do you discuss it with?

M: Usually the people you've played with, they can relate. I can't go up to my girlfriend and say "hey I've just rocket jumped and killed that." "Don't want to hear about that" so, it's usually the people you've shared the experience with. That's why you form such close friendships with them; you usually have a basic topic to relate to.

D: And then how do you communicate with them? Is it through chat groups?

M: A lot of the time it's through the built in chat programmes in the game, or years ago I used to use IRC (internet relay chat) and we'd have a room where we'd all gather to discuss it. There were various rooms for various things. Like for COUNTERSTRIKE or DOTA and you could go there and talk to likeminded people about it. Forums are also fun.

D: And do you regularly use them?

M: I've fallen out of using forums and IRC as that is more time consuming than the actual game itself and I found I wasted more time sitting online talking to people than I actually played the games.

D: And what would you be talking about?

M: Anything, yah. It's not all about the games and once you get to know the people more personally you just talk to them like friends. Yeah, it's like you build a community that's just introduced through a videogame and it just grows from that. Some people move onto other things together, some people split up.

D: And in your life?

M: My life, I mean I do talk about games with my friends who enjoy them, but it's not something which dominates the conversation completely. Well after we've played a game then yes we do or we'll have lams, here people bring all their stuff, like at my friend's house like during the last vacation. It was short and I went down to Cape Town for a week. Literally I went over to my friend's house and us and six others, who have been friends through gaming for about eight years, we just sat around and I wouldn't say partied, that's not the right word to say what we were doing, but we sat around, enjoyed ourselves, talked, ate and played games. Yeah, we just hung out for a while and it was nice.

D: And how would you describe your sense of time?

M: It completely and utterly distorts. Completely! You lose complete sense of time while playing games. What might seem to you like 5 minutes, an hour would've actually passed? Not quite that extreme, but really your sense of time distorts completely.

D: And with the challenges, could we go a bit more in depth with that, is it that you're striving to be better, or is it the challenge...

M: I'm not sure what it is yet, I'm not sure whether it's to better myself or if it's to beat the person that's better than me, it's a combination of both of them. When it comes to single-player games, I dislike intensely being beaten by the computer, I love, that's the big divide between rpg's and action games. In role playing games you can play the game a lot and you see the numbers of your character getting better, but you as a person may not be actually improving your skill, but the numbers are much better and you know you're getting stronger, whereas, games that don't have that, there's no test to see what your skill level is at other than you being able to accomplish certain challenges and that invisible skill, that skill that you pick up, that's what I like the most.

D: And where do you get your feedback?

M: If you beat the game, depending on how well you do. If you beat it better than you did last time, if you use different tactics.

D: And in the online situation?

M: There are things that record your statistics and that would be the sure way of saying this is exactly how accurate I am, this is exactly how many people I've killed, um, there are ways of recording how good you are I suppose.

D: And is that feedback important to you?

M: Usually not. I don't actually pay attention to it. There are, there's quite a craze that's happening with the new generation of consoles, they've introduced this thing called gamer score, I don't know if you've heard about it? Where your console keeps track of your achievements of your video games and it gives you points and it displays that on the internet and some of these achievements are completely arbitrary things you have to accomplish in the game, and it records this and shows it to others. I've never had a particular urge to do those at all, so I don't think it's about wanting to be the best and show it, it's more of a personal thing for me.

D: And feedback from other gamers? Would that be important?

M: It can be, especially if you're losing, then feedback from other gamers is very important. If you're losing very badly at something, you just go "why do you keep beating me whenever I do this" and they say "it's cause you do this, this and this" and then you carry on trying not to do that.

D: Okay, so it sort of gives you a direction?

M: Yeah, that's why forums are very good. It's a very big community.

D: And are people generally quite open...

M: Sometimes, sometimes, people are completely unhelpful.

D: And how do you find yourself, are you quite open?

M: I usually try not contributing that much in online society, um, I find them often to be petty. Like if you're not good friends with a lot of them and if it's all just anonymous feedback, there's often petty struggles and often power struggles on the internet. It's very frustrating, so I usually just sit back and glean information from the web. I'm usually not the one that contributes.

D: Yeah, and what are your thoughts and feelings towards other gamers after a game?

M: I usually feel a little bit closer to them. Like with T, for example, I knew him quite well before this year, but almost because we've been playing QUAKE 3 on a regular basis I've gotten much closer to him.

D: So, it's almost like your relationship in the game impacts on your relationship outside, like you were saying with your friends from overseas?

M: I don't think the game, well if the game were to go, I'd still be friends with them and still maintain the same level of friendship as it was. It provided a good foundation to expand on the friendship.

D: And what do you think gaming has given you as a person?

M: You see, I'm not sure. That's one of the biggest problems with trying to justify my habitual gaming, so I'm not actually sure yet, what it has provided me as an individual. I would say it is a form of escapism, its better than drinking heavily or doing drugs, or some other stuff. It hasn't however, provided me with the benefits sport would. It's given me excellent hand – eye coordination, I'm very good with fine motor coordination. As a result of using computers and technology I'm very proficient in manipulating software, because of my interest with games, I can open up a console and change the components inside cause I've had to fix my own stuff in the past, it's given me that technical skill, but through the games themselves, I don't think they actually imparted any particular skill outside of gaming.

D: And the interpersonal level?

M: Yah, it has helped me make a lot of friends, but my growth as an individual has been outside of gaming...the hardest thing in my life over the last four years has been to try and justify why I still play as many games as I do. I have less time to do them, responsibilities weighing down and it's going to get worse when I leave university, still I haven't found a way to justify it.

D: Do you feel you need to justify it?

M: There is pressure on me to do so. From a lot of people, a lot of social circles. It's still viewed quite negatively to be a video gamer, there's not an extreme stigma, like over a race or gender, but there is a certain amount of social disapproval associated with the games.

D: Why do you think that is? What has your experience been of that?

M: People just assume you're an introvert and would rather be playing videogames than talking to people or out drinking and to a certain extent that is true, there are circumstances where I'd rather play a game than go out and get drunk at Friar Tucks and have people throw up on me, that just sounds unpleasant to me. But a lot of people still view games very negatively and they assume you still live up to the stereotypes

associated with them. Like everyone assumes that if you're a gamer you're never going to have a girlfriend, you're never ever going to have a girlfriend, that you are subconsciously or consciously a very violent person because you're always playing violent video games, a lot of negative stuff gets associated with it.

D: That must be quite difficult...

M: Yeah, it's frustrating as you actually try to tell people, I'm not that violent because I just enjoy playing violent videogames.

D: Do you feel that, well playing violent videogames, what does that provide you with?

M: I don't know yet, I don't know. There is a certain sense of I don't want to call it satisfaction, and it sounds bad saying that, but there is and that is what it is. Yeah, it would be like watching a violent movie or reading a book about a tragedy, you fulfil some sort of urge inside yourself to get it out of the way. But I can't say I enjoy watching a depressing movie or that I enjoy reading a depressing book, but I do enjoy violent videogames, which is the odd thing about them. It would make sense that it's human nature to just divulge in violence. I mean look at what the Romans did.

D: Do you think that it's providing you with a space to explore it, to release it?

M: I do, I do. Actually if I'm realistic about it, it is just an outlet, and there is some significance with the violence and the reason why I enjoy it, but I don't think it's my subconscious wanting to project that violence into real life. I'm a very, very passive person. I wouldn't hit anyone unless extremely provoked, so I can't quite put my finger on what the violence does.

D: And when you're finished playing a violent game..?

M: Sometimes I actually have to stop, if there's too much violence then I need a break. But the way gamers deal with it, violence is, it's almost never done in a realist way, it's almost excessively over the top, and so much so that you're always aware that it's fantastical, it's fictional. I've only had one experience with a game which I stopped playing cause it was too violent, like there were parts of the game that disturbed me a little. The violence! It was a very old game, where you played as syndicates and a friend of mine was playing and he shot down a crowd of civilians and I was upset, it upset me to see that, so every now and then it can strike a nerve,

D: It can trigger something?

M: Yeah.

D: And for the rest of it it's just a game, just a release really? ...Can you talk a bit more about your identity as a gamer?

M: My identity inside the gaming world or outside the game world, they are very different things?

D: Both?

M: My identity outside the gaming world, I'm still trying to figure that one out to be honest. I guess I'm still trying to figure out both of them, but my identity outside the gaming world is very rarely shaped by my identity inside. People are often surprised that I'm not always too outspoken in real life that I'm quite quiet usually, whereas in games it's a lot easier to be open and to talk more.

D: Did that come out when you met your friends who you'd met online?

M: The weird thing is that there's this conflict between my personality and my gaming personality and I think my gaming personality is ideally what I'd like to be in certain situations, I'd like to be outgoing, I'd like to be talkative, I'd like to be liked by everyone, who wouldn't want that, but when you meet new people who aren't used to you in a normal social circumstance, you combine the two in a sense. You combine characteristics of your online persona with your real persona. I've gotten to know people and eventually your real personality is going to come out and they're going to get to know you, but I think that inside of everyone, there is honesty in both personalities; it's just expressed very differently. The internet and the anonymous nature of games really helps to let you just say what you want.

D: And do you feel very comfortable in that space?

M: Sometimes, often I'd just rather not talk. But that's been as of late though.

D: What shifted that?

M: I don't know. I think I'm still very young, but I've outgrown a lot of the communities. A lot of them are filled with much younger people and I find it hard to relate to them. You can still, you find, fantastic people. I've got friends who are five/six years younger than me and they are really great people. They play videogames.

D: And how do you know their ages?

M: You don't. A good indication is how they act, but you can never really tell.

....one of my first memories is me and my father and my sister playing JAYBIRD, it was black and green colours with this little bird jumping around and the snake chases

after you. I can remember the noises and when I hear the noises I get all nostalgic so it's very much been a part of my life so I'd love to be doing research like you're doing.

D: Yeah, trying to capture your experience of being in this space and you say you feel very much at one with the equipment, and there's not really a distinction or separation between you and the technology as such, could you try and get into that space, and what are you feeling, thinking?

M: Remember the first thing I said, it deals with the controls. Well, you lose yourself. You lose that distinction between your hands pressing buttons on a keyboard or on a game pad and you actually thinking about it, it becomes all part of the same experience. The adrenaline rush definitely feeds into it. You gain so much more focus. It's so hard to describe this but a lot of gaming for me is about prediction and when you're fully focused in a game you are able to predict literally like 30 different scenarios in under a second based on a single opponents move, you can see an opponent go down a corridor with a certain speed and within 5 seconds you have to make a judgement on what your next action is going to be to try and get the tactile advantage over him and that, if you do that and get it right, and get it right on a regular basis, that's very much part of the adrenaline rush as you're just able to predict the game, much, much better.

D: So there's a certain skill involved?

M: Oh very much so, a lot of skill and a lot of thinking involved.

D: Can you talk more about the thinking side of it?

M: Initially the thinking, it's a conscious thought process. If you have time while playing a game, you'll sit and think, okay, what am I doing, point and click. But it's not all about moving and looking at the guy and clicking, there's a lot more to it than that. It's about controlling, this is just about QUAKE 3 that I'm speaking about here, it's about controlling everything that's on the level, cause levels are usually small contained little spaces which have you versus another opponent, it's all about controlling and picking up all the right weapons, it's about blocking your opponent from certain spaces, getting into tactical positions which you have the advantage over, if it's height or speed, or ammunition, or armour. And a lot of factors come into that game. If you hear an audio cue, like you hear him jumping in the distance, you'll know exactly where he is, how fast he's going based on the sounds of the jumps, the direction of the jumps, what he's going to go for, depending on what you've been doing, if you've picked up the right

item you'll know if something is there or not there and you have to try and calculate and set up a trap. There's a lot

D: So your senses are quite alert?

M: Very much so, and initially that's all very conscious. And you think about it, where's he going to go, oh he's going to go here, you try that out. But after a while you don't think about it, you'll hear that sound and your body automatically, you won't even think about it, you'll just find yourself automatically changing direction to go somewhere else. It comes to you naturally.

D: So it's almost like you're at one?

M: Yeah, very much so. It's a very weird experience. Even now, I'm very surprised by it, that I find myself connecting so much with something that isn't a person. To understand something so well that isn't actually a person, to understand something that I've never spoken to, that it's actually a machine, it's a very odd experience. I don't fully understand where I get such an adrenaline rush from it, like I don't understand why I enjoy it so much. But I do, I love being at one with the gaming system, understanding it so well that you can act without thinking is one of the nicest things. I enjoy playing squash a lot, and for me it's the exact opposite, 'cause when I play squash I have to consciously think that when I hit the ball it at this angle it goes here and the opponent has to run here and I have to position myself here. Squash is very tactile as well, but I lack the physical abilities and the reaction time to do that. In my mind I equate the two experiences to be similar.

D: Okay, and when you've been in that space what takes you out of it?

M: Usually when the game ends, or something happens in the game and you lose concentration, or like if somebody demands your attention outside of the game.

D: And is that quite frustrating?

M: It is, cause it takes a while to get back into it. It's not just that you sit down and you're automatically there, you sit down and you have to get comfortable again with your opponent's movements. A lot has to do with your opponent. You have to get comfortable again.

D: And how long does that space last for?

M: Anywhere from five minutes. You can be on fire in a game and destroying everyone from five minutes to an hour. My longest I sat down, that street fighter game when I was in C.T, and played against a friend for three hours, we didn't even realize how

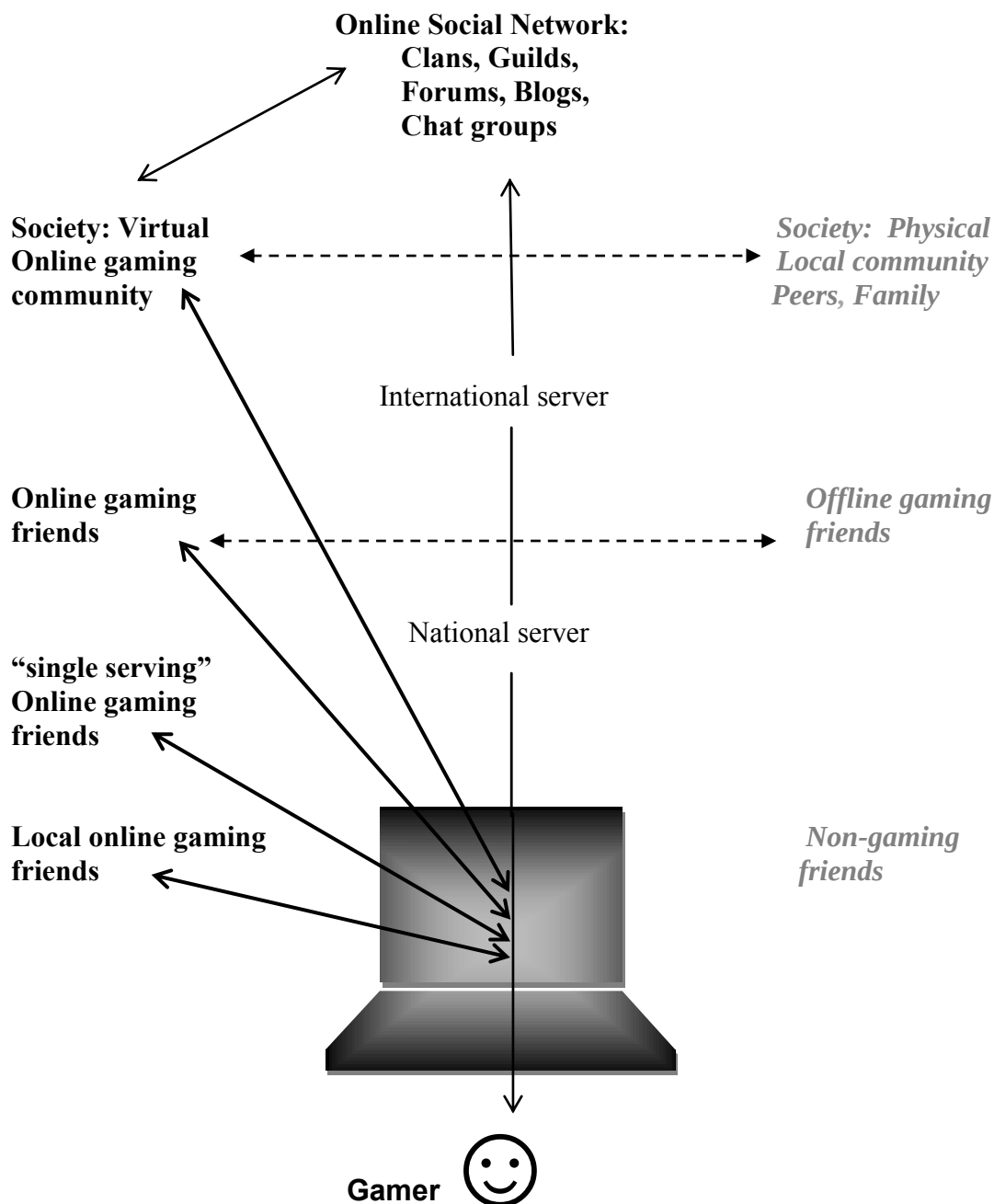
much time had gone. We were so into it that we just sat down and played constantly, constantly, constantly, and before we knew it, it was the middle of the night, we played until four in the morning.....

D: And what about goals, do you have goals when you play?

M: There are sometimes, they're ever changing in videogames, unlike a sport where it remains the same forever. It is a goal of mine to finish everything in that ninja game before I die, but it's not always driven by that. It's to improve and get better than my opponents.

APPENDIX VI

EXAMPLE OF A STAGE IN DATA ANALYSIS



Potential Autotelic Relationships for regular online gamers in the gaming context..

⟷ Multiple existences and experienced realities occurring parallel to each other simultaneously?

⟷ Who you will meet and interact with online depends on the chosen game to be played and your circle of gaming friends

Offline relationships and influences on the gamer's identity and self-perception..

