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Exploring Problematic Experiences: An IPA Study of 'Internet Addiction'

A thesis submitted in partial fulfilment of the requirements for the degree of

Master of Arts

(Clinical Psychology)

of

RHODES UNIVERSITY

by

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March 2013

Declaration

I declare that **Exploring Problematic Experiences: An IPA Study of 'Internet Addiction'** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before any other degree at any other institution.

04/11/14

SIGNATURE **DATE**

(Naaheeda Allie)

Abstract

In the past two decades, a considerable amount of research has been carried out on the phenomenon of excessive Internet use, variously termed Internet addiction, Internet dependency and problematic Internet use. Despite this, there is still little agreement as to what constitutes this phenomenon, whether it should be considered a clinical disorder or not and what leads to this excessive or maladaptive use. The terminology used in this study is that of Problematic Internet Use (PIU). Several theoretical models have been proposed in the understanding of PIU including personality models, operant conditioning models, social cognitive and cognitive behavioural models (Davis, 2001; LaRose, Lin & Eastin, 2003; Young, 1999). A proposed gap in the literature is the lack of studies exploring participant experiences of problematic Internet use. It is for this reason that this study aimed at exploring the experiences of a small sample of individuals with self-identified problematic Internet use. The implications of this phenomenological data for the above-mentioned theoretical models were then reviewed. This study used an Interpretative Phenomenological Analysis (IPA) approach in exploring these aims. A sample of four participants was selected through purposive sampling techniques. Four major themes emerged from the analysis namely: Escapism, Social Insecurity and Validation, Perfectionism and Control. These experiences of participants were also explored in terms of the conceptual models reviewed in order to compare how closely they related to participant experiences. A strong inter-relationship was found between the four themes mentioned above. The Internet appeared to provide a sense of control and validation to these individuals while simultaneously rendering them unable to maintain control of their Internet usage in relation to this. This sense of control was experienced through an escape from negative emotions, offline obligations and at times a dissatisfactory position in reality. Of the four models reviewed, the Social Cognitive model proposed by LaRose et al. (2003) appeared to offer the most relevant understanding of PIU to participant experiences. The presence of maladaptive cognitions also appeared to feature strongly as an underlying factor in participants' PIU, as theorised by cognitive behavioural models (Davis, 2001; Young, 1999) Finally recommendations are made for further more detailed exploration of PIU using interpretative, experiential methods.

[Keywords: Internet, dependence, PIU, behavioural addiction, IPA, phenomenology, experiences, internet gaming, disorder, explanatory models, escapism, perfectionism, control, social validation, social insecurity]

Acknowledgements

I would first and foremost like to express my immeasurable gratitude and appreciation to my God Almighty without Whom none of my endeavours would be possible.

I would like to extend my appreciation to the four individuals who allowed me to explore their experiences of the Internet with them and without whom there would be no study to read past this point. I am also deeply thankful to my supervisor Prof. Charles Young for his guidance, support and calming supervisory manner which curbed many a thesis-induced anxiety attack.

Finally, I would like to thank my parents, family (biological, psychological & adopted!) and friends for their consistent support, encouragement and understanding of my neglect.

"It takes a Village to raise a child"(African Proverb)

- And seemingly as much to raise a thesis

Contents

Chapter 1: Introduction

1.1 Introduction

Since the commercialisation of the Internet in 1995 (Schaffer, Hall,& Van der Bilt, 2000), a variety of research has been conducted on its effects on the lives of consumers. Initially based on Goldberg's use of the term "Internet addiction disorder" in an online psychology discussion group, attention was drawn, particularly in popular media to the possibility that Internet use could be excessive to a pathological extent (Thatcher,& Goolam, 2005). Much debate has since surrounded this phenomenon. While there are some that propose that such a disorder does not exist and that maladaptive patterns of Internet use are 'phasic' and hence resolve themselves through the natural course of behavioural regulation (Grohol, 1999), numerous studies have reported significant negative consequences in academic, occupational, and interpersonal areas of individuals lives' as well as psychological distress in relation to excessive Internet use (Beranuy et al., 2009; Griffiths, 2001; Li,& Chung, 2006; Niculović et al., 2012). Several conceptual models have been proposed to explain this phenomenon and its related 'symptomatology', as well as to justify its classification as a disorder. Unfortunately attempts at understanding this phenomenon have often been based on adaptations of more widely recognised disorders such as substance dependence syndromes and impulse-control disorders (Chou, Condron,& Belland, 2005; Young, 1998).

The variance and debate around terminology used to describe this phenomenon also appears to be a reflection of the uncertainty around the phenomenological nature of Internet 'addiction'. The terminology of 'addiction' in describing phenomena un-related to chemical or physiological dependence is in itself thought to be problematic (Davis, 2001; Satel, 1993 as cited in Shapira et al., 2003). This is partly due to the implications which this has on both the understanding and treatment of this phenomenon (Weinstein,& Lejoyeux, 2010). After nearly two decades of research on this phenomenon, there is still little consensus on what constitutes this disorder, whether in fact such a disorder exists at all, or is merely a 'symptom' of other underlying problems (Griffiths, 1999).

While some studies have attempted to review the literature on Internet 'addiction' periodically, examining convergent and divergent findings across studies (Chouet al., 2005; Douglas et al., 2008; Weinstein,& Lejoyeux, 2010), few studies have attempted to understand

maladaptive patterns of Internet use from an 'insider perspective'; that is, from the experience of the individual (Smith, Flowers, & Larkin, 2009). Studies which have done so have focused specifically on online gaming related experiences of Internet use (Chappell, Eatough,& Davies, 2005; Hussain,& Griffiths, 2009). It is for this reason that an inductive approach to the understanding of excessive or maladaptive Internet use is proposed to be a gap in the literature which is thought to be both valuable and necessary in investigating. This study aims to aid in bridging this gap through an exploration of what individuals with self-identified problematic use of the Internet understand and experience as problematic with relation to this.

The terminology that will be referred to in this study to describe patterns of excessive or maladaptive use of the Internet is "Problematic Internet Use" (PIU) (Shapira et al., 2000). This terminology has been selected due to its broad nature in description of this phenomenon. Although a definition of PIU will be provided in the next chapter, no criteria for PIU were provided to participants. This is related to the inductive nature of the approach used in this study which seeks to explore this understanding from the perspective of the participant – this will be briefly elaborated on below and discussed in greater detail in chapter three. This terminology will at times be used interchangeably with terminology preferred by individual authors in the discussion of the literature.

An interpretative phenomenological approach to investigation of the phenomenon was used for the purpose of this study. This approach, developed by Jonathan Smith (1996) is based on the epistemological principles of both phenomenology and hermeneutics therefore allowing for the exploration of participant experience is its own right, while at the same time allowing for both empathic and theoretically driven interpretation of this experience by the researcher (Smith,& Osborn, 2003). Smith (2004) provides a synopsis of the aims of IPA as idiographic, inductive and interrogative. This reflects the core concerns of the approach with the richness of individual experience, the emergence of knowledge from this individual experiential information and finally the interpretation of this inductive knowledge from the perspective of psychological theory and literature. This approach differs from mainstream approaches to the study of psychological phenomena in that it does not impose theoretical understandings on participants at the outset, choosing instead to allow emergent data to inform the direction from which the researcher will approach it. This method of investigation facilitates a balance between representation of individuals' experience and the contribution of psychologically informed findings to the knowledge base on the subject (Smith et al., 2009).

1.2 Problem Statement

The focus of this study is therefore an exploration of the experiences of individuals with self-reported problematic Internet use. This study is interested in the ways in which Internet use is experienced as problematic by these individuals as well as their understandings of this. The specific research question is: "What are the problematic experiences of individuals with self-reported problematic Internet use?". This information will be gathered through a single, one-to-one, semi-structured interview with each of the participants. Additionally, this study will look at participant experiences in light of current conceptual models of understanding PIU to examine the relevance of these models to the experience of these participants.

1.3 Overview of research

This research study comprises five chapters. This chapter serves to orient the reader to the chosen topic, the reasons for which it has been selected as an important topic of study, a statement of the research problem and provide an overview of what the research aims to cover and how this will be done. The second chapter is a review of relevant literature which informs both the research question as well as the discussion at the end of the study. Chapter three provides a detailed account of the methodological framework chosen, the rationale behind this with regard to the research question, and the steps in conducting the research in relation to the selected methodology. In chapter four, the findings of the analysis conducted on the material will be provided along with a discussion of these findings in relation to the literature covered in chapter one. Finally, a conclusion of relevant findings will be provided along with limitations of the research and implications of findings for future research.

Chapter 2: Literature Review

2.1 Introduction

Internet addiction or "problematic Internet use" as it will be described in this study has been a much researched and much contested field of literature since the commercialisation of the Internet. This chapter seeks to explore the following: various definitions and terminology used in this field; associated symptomatology as proposed by previous research studies and various models of understanding the phenomenon of problematic Internet use. Finally, this chapter examines the place of this research study relative to existing literature and offers a different approach to the study of this phenomenon.

2.2 Defining Problematic Internet Use

2.2.1 Problematic Terminology

Over the years there has been much debate over the existence of Internet addiction as a classifiable psychological disorder. Part of the debate posed by critics is the fact that no stable set of criteria has been developed against which such Internet use can be measured. Terminology used so far include "Internet addiction" (Brenner, 1997; Griffiths, 2000; Hall,& Parsons, 2001; Liu,& Kuo, 2007; Young, 1998), "pathological Internet use" (Davis, 2001), "problematic Internet use" (Shapira et al., 2000; Shapira et al., 2003; Thatcher,& Goolam, 2005; Weinstein,& Lejoyeux, 2010), and "compulsive Internet use" (Widyanto,& Griffiths, 2006). The above definitions comprise a range of conceptualisations of the phenomenon, ranging from descriptions stemming from substance dependence phenomenology to that of impulse control disorders.

Addiction has in the past been defined as a repetitive pattern associated with an increased risk of disease, personal and social problems and is often experienced as a 'loss of control' which persists despite attempts to moderate usage (Marlatt et al., 1988). Alloy, Riskind and Manos (2005) point out that in terms of drug abuse, physiological and psychological need were previously considered as distinct from one another. These authors provided a definition of addiction as a state in which "Drug use (...) had altered the body's chemistry to the point where its "normal" state was the drugged state, so that the body required the drug in order to feel normal (...)" (Alloy et al., 2005; p. 313). As can be seen from the above definitions, the term 'addiction' although sometimes including psychosocial elements in its definition,

necessarily and at times exclusively included a focus on physiological effects on the individual (Davis, 2001).

2.2.2 The Broader Picture of 'Addiction'

Several authors have argued against the use of the terminology "addiction", particularly in describing behavioural addictions (Davis, 2001; Satel, as cited in Shapira et al., 2003). Others still, have questioned the clinical relevance of behavioural addictions (Bradley, 1990; Holden, 2001; Miele et al., 1990). Behavioural addictions, as defined by a characterlogical definition provided by Grant, Schreiber, and Odlaug (2013), involve incapacity to resist an impulse, resulting in actions that are detrimental to one's self or others. These authors go on to describe the phenomenology and natural history of behavioural addictions as being similar to that seen in substance use disorders. Other authors have similarly proposed that clinical features of addiction such as neglect of personal life, mental preoccupation, escapism, mood-modifying experiences, tolerance and concealing the addictive behaviour are present in some excessive users of social networking sites (Kuss & Griffiths, 2011).Griffiths (1995) proposed the concept of a "technological addiction". He defined this as a chemical or behavioural addiction that involves non-human interaction. These addictions such as pathological gambling operate on models adapted from and similar to that of classical addiction. Internet dependency was in this way hypothesized to fall under this specific subset of addictions.

Satel (as cited in Shapira et al., 2003) conversely proposed that expansion of "addiction" terminology to include compulsive behaviours prevents exploration of these phenomena in their own right and runs the risk of imposing already established treatment models for "addiction" upon these behaviours. Davis's (2001) concern is more on the specificity of the terminology used. He argued, as noted in the definitions provided in the previous section, that addiction denoted a physiological dependence between a person and a stimulus and/or substance. He further indicated this as the reasoning behind the term "dependence" being used in the Diagnostic and Statistical Manual of Mental Disorders, (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association, 2000) when dealing with substances, and the term "pathological" in reference to behavioural compulsions such as gambling. DSM 5 (APA, 2013) has however revised the terminology once again, combining the categories of substance use and substance dependence under a single disorder of Substance Use with an accompanying spectrum of severity ranging from mild to severe. Behavioural addictions have

also been included under a new category of Addictive Disorders which includes Gambling Disorder.

As a result of the uncertainty concerning what constitutes Internet "addiction", relatively few authors have committed to an operationalised definition of the phenomenon. While each of the proposed terminologies and conceptualisations provided above have both their own merits and shortfalls, the terminology chosen for use in this study is that of 'Problematic Internet Use' or PIU (Shapira et al., 2000). This terminology was selected partly due to the very uncertainty as to the nature of Internet addiction described above. Other authors who have identified the same difficulty in this field of research have used the same terminology in exploring the phenomenon (Shapira et al., 2000; Shapira et al., 2003; Weinstein, & Lejoyeux, 2010). Weinstein and Lejoyeux (2010) provide the following broad operational definition of PIU: "Problematic Internet use, or addiction, is characterised by excessive or poorly controlled preoccupations, urges or behaviours regarding Internet use that lead to impairment or distress" (p.277). This definition is additionally considered to be suitably broad in that it does not in its wording commit to any specific underlying aetiology nor does it necessarily imply pathology. It is thus considered appropriate for use in this study to facilitate exploration of the specifics of this phenomenon as defined by the participants in this study.

2.3 Features of Internet addiction

As can be seen from above and as has been concluded by reviews of the literature (Koronczai et al., 2011; Weinstein,& Lejoyeaux, 2010), there is no single universally accepted definition of the phenomenon of Internet addiction/dependence. Based on case study evidence however, Chou et al. (2005) have found that there is a common consensus on the existence of such a phenomenon. Other authors have identified common features that appear across definitions (Odacı,& Kalkan, 2010; Weinstein & Lejoyeux, 2010), including an emphasis on length of time spent online (Chang,& Man Law, 2008; Li,& Chung, 2006; Shapira et al., 2003), unease and irritability at times of no Internet use (Li,& Chung, 2006; Odacı,& Kalkan, 2010) and signs such as the need to spend longer periods of time online (Khang, Kim & Kim, 2013). Odacı and Kalkan (2010) also mention frequency of daily/weekly Internet use as a significant measure of Internet addiction. Other frequently listed symptoms include a lack of self-control with regard to Internet behaviours (Khang et al., 2013; Mehroof & Griffiths, 2010; Niculović et al., 2012; Odacı & Kalkan, 2010) or lower impulse control (Dong, Huang, & Du, 2010);

and negative effects or consequences of the individual's Internet use (Chang,& Man Law, 2008; Li,& Chung, 2006) including psychological distress (Beranuy et al., 2009; Shapira et al., 2003) and/or impairment in academic, occupational, or interpersonal functioning (LaRose et al., 2005; Li,& Chung, 2006; Niculović et al., 2012; Shapira et al., 2003). Of the above symptoms, diminished self-control, time mismanagement and psychological distress and impairment in functioning were found to be the most frequently mentioned as well as the most interlinked and will be elaborated upon below.

2.3.1 Diminished Self-Control

The social cognitive model of understanding PIU proposed by LaRose et al. (2003), and in particular the component of diminished self-regulation, seems to best explain this feature of PIU. The above authors propose that this diminished ability to self-regulate Internet behaviours is contributed to when the Internet is used by individuals for *immediate* relief of dysphoric states. Khang et al. (2013) found self-control to most significantly impact both Internet and media usage in terms of flow (uninterrupted usage) and addiction. Similar findings emerged from studies assessing online gaming. Self-control was found to have a negative correlation with online gaming addiction (Kim et al., 2008; Mehroof,& Griffiths, 2010). Mehroof and Griffiths, (2010) also found in the above study, significant associations between online gaming addiction scores and trait and state anxiety. The authors suggested that trait anxiety related to a more longstanding anxiety experienced by a person while state anxiety related to a sense of anxiety that was more temporary in nature and occurred in response to external stressors such as a perceived high workload among students. This finding suggests that individuals with online gaming addictions tend to use Internet gaming as a means of coping with internal and external anxiety factors. These authors found that a greater association with online gaming scores existed in relation to external anxiety factors, and suggested that university students may use online gaming to cope with temporary or immediate emotional arousal. No indications were provided with regard to what these external anxiety factors may relate to, with the exception of a high workload. They suggested that Internet gaming may in this way be used as a coping strategy, similarly to the theoretical proposition offered by LaRose et al. (2003). LaRose et al. (2003) suggested that this becomes problematic when Internet functions are too often used as a means of coping or psychological escapism as this then becomes a conditioned response to dysphoric states which in turn results in loss of control over the behaviour. Other studies have also implicated the concept of

psychological escapism as a function of loss of control over Internet behaviour. Ng and Wiemer-Hastings (2005), for example, suggest that the Internet, and specifically the applications of Internet-relay chat and multi-user dungeons/domains in this study, functions in a similar way to the use of substances in substance dependence syndromes. Like in substance use disorders, the Internet is used to withdraw or escape from negative evaluations and/or stressful relationships, resulting in a loss of control of time spent on the Internet (Ng,&Wiemer-Hastings, 2005).

Young (2008) also mentions escapism through Internet functions as a salient feature of PIU. She further identified common ways in which this escapism is achieved, particularly with regard to Internet sex addictions. The first function of the Internet implicated in escapism is the use of the medium in the avoidance of dysphoric emotions such as stress, anxiety, loneliness and depression. Peele and Brodsky (2000) describe this type of usage as an attempt to fill an emotional void. Internet usage then serves as a means of avoidance or numbing of negative emotions, thereby acquiring positive associations and reinforcing this means of coping/avoidance (Young, 2008). A second feature of Internet escapism involves the use of the Internet to facilitate the establishment of interpersonal/romantic/sexual relationships (Young, 2008). The socially anxious individual may make use of this medium due to the benefits of the anonymity provided by the Internet such as *a)* a decreased ability to detect signs of disapproval and rejection, *b)* the perceived acceptance/interest of other individuals with similar interests and *c)* the anonymity and distance created which fosters more open communication and in turn a greater and more quickly established sense of intimacy (Young, 2008). This use is considered problematic when the individual becomes immersed in online relationships to a degree where they begin to neglect face-to face relationships and in more directly related cases, jeopardise real-world relationships due to involvement in cyber affairs. Thirdly, the Internet is theorised to pose a risk to individuals already struggling with recovery from sex addiction as it provides an alternative means of escapism from dealing with the underlying causes of the initial addiction through provisions of other mediums through which sexual arousal may be achieved (Young, 2008). Finally Young describes the way in which fantasy sexual role play chat rooms facilitate escapism as evidenced by case studies.

2.3.2 Time mismanagement

Several authors have listed excessive time spent on the Internet (Li,& Chung, 2006), frequency of Internet use (Odacı,& Kalkan, 2010), or problems with time management due to Internet use as a proposed feature of problematic Internet use (Shapira et al., 2003; Young,

1999; Niculović et al., 2012; Chang, & Man Law, 2008). Time mismanagement or loss of control over time spent on Internet use appears to underlie most presentations and associated features of PIU. For instance, in a study by Li and Chung (2006), breakdown in face to face social relationships as well as sleep deprivation and related disturbances in academic functioning were all listed as features of an inability to moderate time spent on the Internet. Li and Chung found that students reported an inability to limit or control time spent on Internet activities as one of the most challenging features of trying to re-establish control over their Internet use.

2.3.3 Psychological Distress and Impairment in Functioning

Research studies in relation to the effect of Internet use on social, academic and occupational functioning have focused on several contexts including multitasking and texting in university students (Clayson, & Hayley, 2013), neglect of work and face to face social interaction in university students (Niculović et al., 2012), dependence on Internet relationships among socially anxious individuals (Davis, 2001), Internet sex and implications of this in offline relationships (Griffiths, 2001), Internet gaming (Ng&Wiemer-Hastings, 2005), experiences of certain online games (Chappell et al., 2006) and self reported, global negative effects.

Li, and Chung (2006) describe problems in several different areas of Internet users lives as reported in their study of Internet addictive behaviour in university students. These include reported difficulties in academic functioning, with students experiencing difficulty completing assignments, studying for exams and paying attention in classes due to sleep deprivation. Other reported negative effects include neglect of family responsibilities and face-to-face social relationships as well as conflict with family members and negative feelings toward others questioning the addicted individuals' Internet use/behaviours (Young, 2008). This was found to be particularly devastating in the context of online sex addictions. Young proposed that individuals who engage in cyber-sexual relationships over time come to value these relationships more highly due to the accelerated rate of intimacy established as a function of the anonymity offered by the Internet. This in turn is suggested to increase the user's dependence on this virtual interaction as well as increase their isolation from real-life partners or relationships, thus leading to breakdowns in interpersonal functioning.

Conversely, although surveys have found that young people are drawn to instant messaging due to the freedom and ease of access that the medium allows them, they also feel trapped by this same function and pressured to respond (Clayson,& Hayley, 2013). This then presents a

double edged sword to the Internet user who finds the very qualities of the medium which he/she finds comforting, also a source of psychological distress. Psychological distress appears to be a sensitive indicator of PIU. Several authors agree that there is no distinct marker or cut-off point for addictive Internet behaviours (Davis, 2001; LaRose et al., 2003). PIU is conceptualised as being on a spectrum with suspicion of pathological or problematic use being raised when this use becomes distressing to the individual and/or when areas of the individual's functioning become impaired as a result of Internet use (Davis, 2001; LaRose et al., 2003; Shapira, 2003). With regard to the nature of the relationship of psychological distress to PIU, researchers appear to differ in their hypotheses. Beranuy et al. (2009) appear to define psychological distress as comprising lowered self-esteem, and increased feelings of loneliness, depression and/or anxiety. While some authors propose that this distress arises from factors inherent in individuals' use of the medium itself (Clayson,& Hayley, 2013) other authors propose that this distress is a result of difficulties experienced in other areas of functioning as listed above (Hall,& Parsons, 2001).

2.4 Implications of PIU – Why is this so "problematic"?

As mentioned above, PIU is considered as being on a spectrum with different levels of severity. While some authors suggest that PIU is a "benign" problem which is amenable to but does not necessitate therapeutic intervention (Hall,& Parsons, 2001), others suggest that although individuals experience periods in which they are able to better regulate their media usage, they experience recurrent relapses due to an underlying difficulty (LaRose et al. 2005). Others still, suggest that PIU is a considerably large problem requiring a treatment approach tailored specifically to its related phenomenology (Young, 2011). Both academic research and popular media has focused on the occupational, academic and social consequences associated with PIU as briefly described above.

Popular media has caught on to the phenomenon of Internet 'addiction' with major publications such as The WallStreet Journal and the New York Times publishing articles on the emergence of a 'texting revolution', health risks associated with 'hypertexting' (Jancin, 2011) and perspectives on how modern technology could be "rewiring" our brains (Richtel, 2010). Making allowance for some degree of sensationalism associated with popular media, these hypotheses are not completely unfounded. Neurocognitive effects such as a diminished ability to filter irrelevant stimuli in heavy media users for example, was noted in one study (Ophir, Nass & Wagner, 2009), while another brain-imaging study found that Internet 'addicted' individuals showed greater sensitivity to reward and diminished sensitivity to

punishment. Such studies have however acknowledged difficulty determining whether these findings are the cause or a result of excessive media/Internet use. While these concerns appear to be related to long-term adverse consequences of excessive use, shorter term consequences such as impact on academic, social and occupational functioning have drawn much attention as mentioned above. Authors have identified college students as a population particularly vulnerable to development of PIU (Hall,& Parsons, 2001; Kandell, 1999). This is thought to relate to both developmental and environmental factors. Among the developmental factors proposed was the developmental task of establishing intimate relationships (Kandell, 1999). Online interactions were considered to allow for a less stressful avenue for the negotiation of this developmental task, a finding that was consistent with other related research (Davis, 2001; Young, 1998). A problem noted by Hall and Parsons (2001) with regard to this however was the danger of individuals in this developmental stage using the Internet to escape rather than resolve these developmental tasks, with possibly negative implications for their offline relationships later in life. With regard to the environmental predisposing factors, Kandell (1999) suggested that ease of access to the Internet as well as expectancy for use of the medium may contribute to problematic usage in this population.

The current Internet penetration rate was estimated as ranging from 1.5% to 8.2% globally (Weinstein,& Lejoyeux, 2010). This estimate was made taking into consideration methodological limitations such as criticism of scales used. Thatcher & Goolam (2005) calculated the prevalence rate of PIU among South African users to range between 1.67% and 5.29% at an estimated Internet penetration rate at the time of 7%. With a current global Internet penetration rate of 34.3% (Internet World Stats, 2014) and South African Internet penetration rate calculated as close to 20% (World Wide Worx, 2013b), this opens up the possibility for hundreds of thousands more individuals to be affected by this. Assuming the accuracy of the above measures and the validity of the above mentioned adverse consequences of excessive Internet use, the increased accessibility of the Internet worldwide opens up the possibility for a greater number of affected individuals.

With regard to the special population identified by Hall and Parsons (2001), the above stats on Internet penetration are likely irrelevant. Most university campuses are equipped to offer students unlimited Internet access. This would likely place Internet penetration statistics among university or 'college' students at 100% of this population. The sudden unlimited

access to the Internetprovided to individuals within this population who may have had no access or limited access to the Internet may well prove overwhelming to these users. This is of course merely speculative. The concerns proposed in previous studies (Hall,& Parsons, 2001; Kandell, 1999), with relation to psychological and developmental vulnerability of university students is however emphasised here.

2.5 Some popular Internet applications/functions implicated in PIU

In a recent study by Van Rooij et al. (2010), various Internet functions were found to be associated with PIU. These included downloading, social networking, Microsoft Network (MSN) use, chatting, blogging, online games and casual games. The application with the strongest addictive potential was found to be online gaming (Van Rooij et al., 2010; Chappell et al., 2006; Lee, et al., 2007), although all of the above listed applications were thought to share a social nature and relatively rapid feedback mechanism confirming the salience of the social aspect/interactive potential of the Internet in the development of problematic use (Whang, Lee, & Chang, 2003; Young, 1998; Li,& Chung, 2006). The second strongest correlation with PIU was found to be social networking (Van Rooij et al., 2010). Use of the Internet for engagement in sexual and/or gambling related behaviours are considered as separate phenomena from the above mentioned Internet related phenomena by some authors (Davis, 2001; Griffiths, 1995). This is due to the hypothesised underlying nature of these behaviours as revolving around sexual gratification and reward (respectively), which are proposed to exist independently of the medium of the Internet. Despite this there appears to be several areas of overlap across the different functions used. For that reason, Internet sex addiction and online gambling have been included in the discussion below, despite their hypothesized differences from online gaming and social networking, which will be further elaborated upon later. These various Internet platforms will be defined and discussed individually below.

2.5.1 Social Networking sites

Several authors have implicated social aspects of the Internet as a factor in the development of PIU (Kuss,& Griffiths, 2011; Kirschner,& Karpinski, 2010; Davis, 2001; Ridings,& Gefen, 2004; Li & Chung, 2006). According to Davis, "the need for social contact and reinforcement obtained online results in an increased desire to remain in a virtual social life"

(Davis, 2001; p.188). Ridings and Gefen (2004) attributed the social appeal of the Internet to findings in social psychology of the human need for affiliation or belonging to a group. This finding applies not only to social media/network usage but appears to pervade through the different Internet applications used. Social networking sites (SNS) in particular have received considerable attention in the past few years due to their increasing popularity, particularly among adolescents and young adults, listed as the heaviest SNS users (Kirschner,& Karpinski, 2010; Kuss,& Griffiths, 2011).

boyd and Ellison (2007) provide a comprehensive definition of social network sites as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system", (p. 211). They make a distinction between the terminology 'network' and 'networking' and propose that the latter places emphasis on the function of these sites to initiate relationships, including relationships with strangers. These authors maintain that while users may choose to use social network sites for this purpose, it is not the predominant focus of their usage and that the unique feature of social network sites is the capacity they allow for the individual to define and make visible their social ties to others. Kuss and Griffiths (2011) describe social networking sites as "virtual communities where users can create individual public profiles, interact with real-life friends, and meet other people based on shared interests". One of the current most popular social networking sites, according to Kuss and Griffiths, is *Facebook*. *Facebook* was initially established as a closed virtual social network for students at Harvard University but was later expanded to users outside of the university. In 2011, studies found that Facebook comprised more than 500 million users worldwide (Kuss,& Griffiths, 2011). Current statistics on social media usage indicate that Facebook is the leading SNS both internationally and nationally with 1 155 million (Smith, 2013) and 9.4 million (World Wide Worx, 2013a) users respectively. Other popular SNS sites include YouTube, Sina Weibo, Whatsapp and Google+ internationally (Smith, 2013) and Twitter, LinkedIn and Google+ in South Africa (World Wide Worx, 2013a). Other SNS sites such as Twitter have shown exponential growth in the past year with an overall increase of active members by 129% (Smith, 2013).

2.5.2 Online gaming

Mortenson (2006) provides a brief history of online gaming, starting off with the first dominant online gaming interface used, known as Multiple User Dungeons/Domains, or more commonly referred to as MUD's. MUD's are text-based games or social spaces which operate primarily through text-based commands or interaction. These interactions are completely text-based and an entire virtual world is created through textual descriptions of everything from geographical layout, to character description, to 'movement' within the game. A more recent technological development is that of Massive Multiplayer Online Role-Playing Games (MMORPG's) which evolved from MUD's but provide a more realistic fantasy simulation involving three-dimensional graphics and a range of communication tools for interaction among players (Papargyris, & Poulymenakou, 2005).

The Entertainment Software Association (ESA, 2013), a body offering services to interactive software publishers have calculated the proportion of Americans who play video games to be approximately 58% of the population. Of this 58%, 55% of gamers are male and 45% female, showing a more or less equal distribution in terms of gender appeal of the medium. According to ESA statistics, the type of online games most played are puzzle/ board game/ trivia/ card game type games with action/sports-game/ role playing games as the next most frequently played category, followed by "persistent-multiplayer universe" type games. Role playing games are also listed as one of the best-selling game categories in 2012.

Van Rooij et al. (2010) in a summary of previous research done in the field of gaming addiction, propose the following explanation for the addictive potential of Internet gaming. Computer/video games are proposed to provide visual and aural stimulus rewards, peer-group attention/approval, require total attention, while digital score keeping and incremental rewards for winning which serve a reinforcing function. These are similar to the appeal of slot machines found in pathological gambling. Gaming however, according to Van Rooij et al (2010), incorporates social context and social interaction into the above-mentioned appeal. This occurs through the reception of recognition and opportunity to display rewards to others in the virtual world.

Online games, particularly role-playing games are thought to be especially time-consuming with hours of gameplay going into character design and development (Van Rooij et al., 2010).

2.5.3 Online Pornography/ Sexual chat rooms

Young (2008) describes Internet sex addiction as typically constituting the viewing, downloading and trading of online pornography and/or involvement in adult fantasy role-play or chat rooms. Young proposed this specific use of the Internet to be the most common form of problematic Internet use due to the pervasive availability and accessibility of sexually explicit content on the Internet. Cooper (1998) attributed some of the appeal of Internet sexual material and applications, particularly online chat rooms, to the opportunity created in this virtual medium for experimentation and exploration of sexual fantasies. He further listed three factors: Accessibility, Affordability and Anonymity (termed the *Triple A Engine*), which he proposed act as risk factors for individuals who were currently affected by a sexual compulsivity or those with a psychological vulnerability or predisposition to sexual compulsivity. This relates to the concept of specific PIU theorised by Davis (2001) where the Internet is used as merely a medium for the expression of an underlying pathology. An adaptation of the *Triple A Engine* was developed by Young et al. (2000), which proposed the following three factors of Anonymity, Convenience, and Escape as the three most salient risk factors in the development of PIU. Anonymity is thought to facilitate and enhance the potential for experimentation particularly through the promotion of more open and confident interaction. The salience of this particular feature of the Internet is supported by several other authors (Cooper, 1998; Davis, 2001). All three factors are described in an inter-related way where each informs the other. The convenience of easily accessible role-playing chat rooms for example is proposed to facilitate the use of the Internet for indulgence in fantasy which is further proposed to be a function of escape or avoidance of negative emotions.

2.5.4Online Gambling

Online gambling is described as comprising a range of online behaviours involving betting money on uncertain outcomes or participating in games of chance with the potential for monetary gain (Scholes-Balog,& Hemphill, 2012). These authors further subdivide online gambling into two commonly used categories, namely; online wagering and online gaming. The former is defined as betting on the outcome of events (such as sports matches) while the latter is defined as comprising all forms of casino games, including card games which can be played online. Limited mention of online gambling appears in the PIU literature, assumingly due to its general conceptualisation as a sub-type of a separate disorder, namely, Pathological

Gambling. There appear to be fundamental differences between online and venue based gambling however, despite the similar activities for which they may be used (Scholes-Balog,& Hemphill, 2012). Among these disparities are the greater accessibility and convenience associated with online gambling which is hypothesized to facilitate impulsive gambling behaviour as well as the prevalence of problematic gambling (Productivity Commission, as cited in Scholes-Balog,& Hemphill, 2012; Monaghan, 2009). The anonymity provided by the Internet is also hypothesized to facilitate both reckless and underage gambling (Monaghan, 2009; Corney,& Davis, 2010). Other authors found similar evidence for the behaviours of gambling alone, lying about one's age online and using two or more gambling activities on a regular basis online, as placing individuals either in the "at risk" or "problem" category for developing problematic online gambling (McCormack, Shorter,& Griffiths, 2013). McCormack et al. (2013) also found that problem gamblers were more likely than "at risk" gamblers to use online gambling as a means of escapism. These individuals were also found to experience mood-modification through these behaviours.

As can be noted from the above discussion, despite the different functions for which the Internet is utilised, several common characteristics or problem areas are found in problematic users of the medium. These include the need for social contact and approval accessed through the Internet, the function of escapism which it provides and the facilitation of both these uses by the anonymity provided by the technology. It is therefore difficult to separate PIU phenomenology either into discrete categories of symptoms or into application specific forms of PIU as they more often than not overlap. Although many researchers have attempted to approach PIU from an application-specific perspective in order to better understand and define the phenomenon, several common features appear across users of different applications, presenting PIU as seemingly independent of Internet use modality. It is then perhaps useful to conceptualise PIU in terms of more holistic theories of understanding the development of this phenomenon as well as its contributory causes and progression.

2.6 Some prevailing perspectives of PIU

LaRose et al. (2003) reviewed the literature on PIU and categorised four dominant perspectives on PIU, namely; the disease model, personality theories, the social cognitive model and the operant conditioning model. The disease model, according to LaRose et al. (2003) was predicated upon models of Internet addiction which were conceptualised as disorders of mental health. Authors such as Young (1999) and Davis (2001) have developed

conceptualisations of PIU in line with this. These models will be looked at last, under the heading of cognitive-behavioural models, in line with the theoretical orientation used by these authors.

2.6.1 Personality and PIU

LaRose et al. (2003) group the first popularly proposed set of phenomenological explanations under "addictive personality models". In a review of personality models of addiction, LaRose et al. found that an underlying 'addictive personality' was proposed as an explanation for multiple substance addictions experienced by individuals. While correlations were found across media addictions in some studies (Greenberg, 1999), other studies found no relationship between substance addictions and behavioural addictions (Finn, 1992).

Other authors have investigated the relationship between Internet dependency and other personality correlates such as depression, loneliness, life satisfaction, cognitive distortions, perfectionism, self-control and manner of perceiving events. Pessimism was found for example to influence Internet dependency. This was thought to be a result of the opportunities provided online for passive avoidance strategies associated with pessimism such as distracting oneself online (Celik,& Odacı, 2013). Passive behaviours listed by these authors include sleeping, watching television and going online. Since these behaviours/activities are employed as distraction/avoidance strategies, the authors proposed that it is easier for individuals to lose track of the amount of time spent on them as there is no goal or endpoint in mind when initiating these activities.

Loneliness has also been investigated as a contributory factor to developing problematic Internet use. Individuals whose experience is dominated by feelings of loneliness have been found to exhibit greater Internet dependency than those who experience this only some of the time (Ceyhan,& Ceyhan, 2008; Odacı,& Kalkan, 2010). Depression was also found to be positively correlated with PIU (Ceyhan,& Ceyhan, 2008). It has been suggested that these individuals may have developed the perception that face to face social interaction will result in failure and thus they exhibit a preference for virtual social interaction; in this way contributing to increased problematic Internet use (Caplan, 2003). Douglas et al. (2008) found some support for this in their meta-synthesis of research on Internet addiction. They mention specifically the theme of the Internet being used as a means of escapism or for

fulfilment of psychological needs more especially by individuals with a negative self-image. These have been grouped together as "push" factors or factors which drive individuals to use the Internet. Marlatt et al. (1998) however point out that many of these personality correlates such as depression and loneliness could be predisposing factors as well as consequences of addictions. An additional construct proposed by Douglas et al. (2008) was that of control strategies which comprised both attempts by the individual to control Internet use as well as the resultant behaviours associated with these attempts at control. Both these components are reflective of a difficulty with self-control associated with PIU, a significant finding which has appeared across other studies (Khang et al., 2013; Mehroof & Griffiths, 2010). Finally, maladaptive perfectionism has been linked to problematic Internet use (Lehmann,& Konstam, 2011). A distinction has been noted in recent literature between adaptive and maladaptive perfectionism (Nyland, 2004; Page, Bruch & Haase, 2008; Radhu et al., 2012). One definition of maladaptive perfectionism is "the tendency to demand of others or oneself higher levels of performance than required while engaging in overly critical self-evaluations" (Radhu et al., 2012; p. 357). The elements of unreasonably high standards is one found across several conceptualisations of the phenomenon (Hamachek, 1978; Nyland, 2004; Page et al., 2008) and is thought to be a product of dysfunctional thinking (Hamachek, 1978; Nyland, 2004) and linked to psychosocial distress (Flett et al., 1998; Hewitt et al., 2003). Lehmann and Konstam (2011) hypothesized that the Internet provides a medium for the expression of this maladaptive perfectionism which could later develop into a maladaptive coping mechanism. A personality model of understanding maladaptive perfectionism proposed that this arises out of a cognitive dissonance created when the individual's perceptions of their ideal self is disparate from their actual self (Leonard,& Harvey, 2008). This was thought to then spur on perfectionistic strivings in an effort to reduce this discrepancy. Based on this understanding, Lehmann and Konstam (2011) hypothesized that the Internet is used as a coping mechanism due to the potential it provides for the creation of a perfect 'profile' or avatar of oneself, thereby easing the above-mentioned disparity within the self.

2.6.2 Deficient Regulation

In the next model cited by LaRose et al. (2003), the Social Cognitive Model, Bandura's (1991) concept of the self-regulatory mechanism and deficiencies within this system are applied in the understanding of the development and perpetuation of PIU in some (minority) of individuals when compared to the general population (Hall,& Parsons, 2001). LaRose et

al. (2003) go on to describe the self-regulatory mechanism as described by Bandura as a "process of self-control through the sub-functions of self-monitoring, judgemental process and self-reaction" (p.232).

Self-monitoring is explained as the process of observing one's own behaviour and its consequences for the self and others in the environment (LaRose et al., 2003). Effective self-monitoring then occurs when one is able to attend to one's behaviour, analyze the normalcy of the behaviour relative to the context, and do this in an accurate manner, in close temporal proximity to the behaviour. Judgmental process is the attached evaluative component whereby behaviour is evaluated in relation to personal standards, societal norms, social comparisons and personal comparisons of past behaviours. The self-reactive function serves as the reward function through which behavioural or psychological rewards for behaviour are processed or reinforced. This occurs either through self-administered rewards or through evaluation of one's position relative to the abovementioned standards/values, resulting in psychological rewards of increased self-respect or self-satisfaction.

Self-monitoring, judgemental process and self-reaction thereby make up the process of self-regulation (LaRose et al., 2003). PIU is then conceptualised as a deficiency in these self-regulatory processes. Internet usage behaviours are proposed to become habitual as self-regulatory mechanisms become weaker. Deficient self-regulation is viewed on a spectrum in this model, with efforts being made to re-establish regulatory mechanisms and subsequent failure to maintain this, explained as accounting for the relapse phenomenon seen in most diagnostic conceptualisations of PIU.

An important factor in the development of regulation deficiencies is thought to be the use of the Internet to relieve dysphoric states, particularly depression (LaRose et al., 2003). The repeated use of media to provide immediate relief from dysphoric states is proposed to create a conditioned response to this dysphoria. What starts off then as a process of self-reactive incentives (i.e. consciously using the Internet to relieve negative feeling states), over time becomes a conditioned and automated response, increasing in strength each time it is used for this purpose.

2.6.3 Conditioned PIU

Operant conditioning models, mentioned as the third dominant understanding of PIU (LaRose et al., 2003) propose that addictive use progresses in four stages: initiation, transition to ongoing use, addiction, and behaviour change (Marlatt et al., 1988). In the initial or experimental phase the individual may be influenced by a genetic predisposition or family history of addiction. Social and personal outcomes of the behaviour then influence whether the behaviour becomes an ongoing one or not. LaRose et al. (2003) propose that the transition from general to problematic use, particularly in the case of media usage (including the internet) then occurs when it is used as the sole medium to relieve stress, loneliness, depression or anxiety. This concept of Internet usage as a means of escapism is one that appears to be common across different models of the development of PIU. As the individual's usage of the Internet increases, negative consequences of this increased usage in other aspects of their life emerge, leading to further dysphoria and increased tendency to resort to escapism. Greater amounts of Internet usage are then needed to provide the same feeling (tolerance) and anxiety rises when the individual is prevented from Internet use (withdrawal). Salience of PIU is proposed to be evident in the individual's prioritization of Internet usage or seeking behaviours at the expense of regular social interactions and finally, despite attempts to give up Internet usage or periods of abstinence, the individual inevitably relapses.

2.6.4 Pathology and Cognitions in PIU

Young (1999) and Davis (2001) have built on these predominantly behavioural models and each proposed cognitive-behavioural models of problematic Internet use. Young (1999) proposed that PIU is triggered by 1) online applications, 2) feelings, 3) cognitions and 4) life events. Although she stated no definite aetiology, she theorised the underlying role of maladaptive cognitions and co-morbid psychopathology with particular reference to mood disorders. Young based her theory on cognitive findings in the study of traditional addiction theory. Based on this, she generalised that individuals with PIU tend to employ catastrophic thinking – as commonly found in individuals with other addictions – and therefore use the Internet as a means of psychological escape from this. She later confirmed the salience of psychological escapism in research focused specifically on Internet sex addiction (Young, 2008). In an earlier study by the same author, it was found that the maladaptive cognitions

found in individuals with "low self-esteem" and "clinical depression" were also associated with PIU (Young, & Rogers, 1998).

Davis (2001) proposed a cognitive theory related to the involvement of perception in PIU. The specific cognitive biases that he proposed included extreme over-generalisation, an all-or-nothing way of thinking about themselves in relation to the outside world. These ways of thinking are reinforced by negative automatic thoughts such as "the Internet is the only place where I am respected". Dependency on the medium is then generated through this type of generalisation would often feel that they would not have a social life without the Internet.

Davis (2001) proposed in his aetiological model that PIU arises from maladaptive cognitions acting in conjunction with problematic behaviours which either intensify or maintain the PIU. Unlike in previous models however in which maladaptive cognitions have often been recognised as antecedents of the more salient behavioural and affective components of PIU (Young, 1996), Davis (2001) proposes that maladaptive cognitions in fact precede the development of behavioural and affective symptoms associated with PIU. Recent research findings have concurred with the salience of negative cognitions in the development and perpetuation of PIU. In a recent study, interpersonal cognitive distortions were found to be positively associated with PIU (Celik & Odacı, 2013), while in another study, negative self-appraisals were linked to loneliness which in turn was marked as a predisposing factor for developing PIU (Odacı & Kalkan, 2010). He goes on to distinguish between proximal and distal contributory causes, as well as how these causes interact to produce a specific or generalised PIU. "*Specific Pathological Internet Use*" refers to the use of the Internet as a facilitative medium for other 'addictions' such as sexual material/services, auction services, stock trading and gambling. He proposed that these types of addiction would exist even in the absence of the Internet. "*Generalized Pathological Internet Use*" refers to a more general and multidimensional overuse of the Internet and can include a lack of goal orientation in ones use of the Internet. It is assumed to be especially associated with the social aspects of the Internet as this includes overall, non-goal specific use of the Internet including but not limited to online chat and email. With regard to the aetiology of both of these PIU subtypes, Davis goes on to differentiate between distal and proximal causes with regard to aetiological proximity. Distal causes, according to Davis, refer to factors which contribute to the development of pathology but are not sufficient as a sole precipitant. To use the analogy provided by Davis in his explanation of the concept, in the chain of events leading up to the

development of a set of symptoms, distal contributing factors would lie on the end furthest from the emergence of symptoms. He goes on to further explain the concept of distal factors in terms of a diathesis-stress model. The diathesis stress framework proposes that individuals develop pathology as a result of an inherent predisposition to the particular type of pathology which is then triggered or exacerbated by environmental factors or stressors. In the conceptualization of PIU, pre-existing psychopathology acts as a diathesis and introduction to the Internet or new Internet technology acts as a stressor. Davis asserts that the existence of primary psychopathology is a distal, necessary factor in the aetiology of PIU. Other studies have implicated comorbid pathology such as depression (Ozcan & Buzlu, 2007; Young, & Rogers, 1998), social anxiety (Lee et al., 2014), and substance abuse in individuals with PIU. According to Davis (2001), these act as pre-disposing and precipitating factors respectively, with the response of the individual to the Internet exposure serving as reinforcement for continued use. One shortcoming is that even though these co-morbid disorders have been linked to PIU, it is not clear whether their existence preceded that of the PIU or were a result of it. Davis recognises that one criticism of this criterion (the necessity of pre-existing psychopathology) is that one might argue that the presenting symptoms are merely an extension of the underlying depression (for example), but argues that the symptoms associated with PIU are qualitatively different from those associated with other syndromes and should be explored as such.

Davis (2001) argued that greater attention should be paid to the proximal factors. These, according to him, are the maladaptive cognitions used by the individual. He proposed that these are sufficient factors in the aetiology of PIU. He further proposed two main subtypes of maladaptive cognitions; namely, (negative) thoughts about the self, and (negative) thoughts about the world. These thoughts are guided by a ruminative cognitive style which serves to both maintain and exacerbate PIU. Davis suggests that this cognitive style inhibits the individual's ability to take action and employ effective interpersonal problem solving, thus increasing the duration of PIU and maintaining the cycle. Davis further suggests that this self-focused rumination also leads to a reinforced memory about the experience of Internet use, and facilitates a greater recall of these memories by the individual, maintaining this vicious cycle. Other associated cognitive 'distortions' as identified by Davis include self-doubt, low self-efficacy, negative self-appraisal and an all-or-nothing cognitive perspective. The Internet is then supposedly used as a non-threatening medium through which the individual is able to gain more positive responses from others. This focus on cognition, according to

Davis (2001), is in contrast to previous cognitive behavioural models which placed emphasis on a diathesis-stress (distal) explanatory theory of PIU. These models placed primary emphasis on behavioural factors in the aetiology and maintenance of PIU.

While the importance of conceptual understandings of disorders is acknowledged, all of the models covered appear to be purely theoretical and are not grounded in actual participant experience. It is for this reason that the researcher considers it of importance to analyse participant experiences both in their own right, as well in relation to the models mentioned above. Apart from the mandate for further research testing the proposed cognitive behavioural understanding of PIU in both Davis (2001) and Young's (1999) studies, an understanding of the phenomenology of PIU is a practical necessity in the age of the Internet. Less than a decade ago, a PIU prevalence rate of between 1.67% and 5.29% of at the time 3.3 million Internet users was recorded in a South African study (Thatcher & Goolam, 2005). At the time however, the estimated Internet penetration rate was only 7% of the population. With the most recent estimate of Internet penetration rate in South Africa reportedly nearing 20% (World Wide Worx, 2013b), even with a presumably stable prevalence rate, the number of individuals with PIU would have increased significantly. Current research on the phenomenology and aetiology of PIU is severely limited. A better understanding of its phenomenology would aid both the identification of vulnerable populations for PIU as well as better inform treatment protocols.

There are still bound to be sceptics regarding the importance of such research, particularly in light of the notable omission of PIU from the newest revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM V) (APA, 2013). The DSM V which has just been released in the past year has not included Internet dependence as a diagnosis, but has listed "Internet gaming disorder" under a specific section which mandates further research. While some professionals propose that this is proof that the "disorder" never existed (Grohol, 2013), this may be yet another instance of the shortcoming of the medical and allied health professional field that Balt (2012) speaks of. Balt proposed in an article on the subject, that often, health care professionals fall into the trap of invalidating clients' distress simply because it does not fit into their explanatory model/ understanding of that particular sickness. He goes on to argue to a more phenomenological approach to patient's symptoms in the exploration of their distress/ symptomatology.

Finally, Balt (2012) asserts the importance of exploration of phenomenology with clients. Balt highlights the importance of not simply accepting explanatory models as absolute truths which may or may not capture the experience of the phenomenon by the client. The researcher thus proposes that by using participant experiences to test a theoretical model, the theoretical and explanatory models that do exist may be adapted and/or expanded accordingly. This echoes the earlier proposition and caution by Satel (as cited in Shapira et al., 2003) about all "addictions" not being grouped under the same phenomenology and treatment protocols. The aim of this research is thus to explore the subjective experiences of individuals with self-identified problematic Internet use using an interpretative phenomenological epistemological framework. A related aim will be to compare existing theories of PIU to the data generated to determine whether there is any relation or overlap or consistency with participant experience. The reasons for the selection of this particular epistemological approach will be further elaborated upon in the following chapter.

Chapter 3: Methodology

3.1 Introduction

This chapter aims to provide a detailed account of all factors related to the methodological framework used in conducting this research. This will firstly include a statement of research aims and the specific research question relative to the study. This will be followed by a brief history of and introduction to Interpretative Phenomenological Analysis as a method for conducting research in the social sciences as well as a discussion of the appropriateness of this approach to answering the research question. A description of the methods used with regard to sampling and sampling size, data collection and data analysis procedures will then be provided. A discussion of the relevance of chosen methods for the above in light of the methodological approach will be provided in each of these sub-sections. Finally methods to maximise validity of research findings will be discussed, followed by ethical considerations in conducting the study.

3.2 Research Aims

This research aimed to explore the experiences of individuals who subjectively categorised their Internet use as problematic. An additional aim was to compare the experiences of these individuals to the theories proposed in chapter one in order to examine how closely participant experiences of PIU aligned with conceptual understandings of this phenomenon. The specific research question is: What are the problematic experiences of individuals with self-reported problematic Internet use?

3.3 Methodology

3.3.1 Introduction to IPA

Interpretative phenomenological analysis was developed by Jonathan Smith in an attempt to introduce a psychological theory or framework from which experiential and qualitative knowledge could be generated while still being able to complement mainstream psychological research (Smith 1996; Smith et al., 2009). This aimed at restoring a balance between experimental and experiential knowledge generated in psychology, the former of which appears to have dominated for some time (Smith et al., 2009; Biggerstaff,& Thompson, 2008). Although IPA appears to be a relatively 'new' approach, it builds on older more recognized theoretical foundations such as phenomenology and hermeneutics (Smith, 1996; Biggerstaff & Thompson, 2008) and is according to Smith et al. (2009), merely an

alternate way of operationalising this. This was done with the aim of creating an approach to the study of psychology which could contribute findings that would be recognised by mainstream psychological approaches while at the same time expanding the focus of the discipline from generation of experimental to experiential knowledge (Smith et al., 2009). Although IPA originated in and was tailored to the study of psychology, it has since been used in many other social science disciplines.

The 'I' and 'P' of the IPA approach indicate the two central theoretical concepts upon which this approach rests; that is phenomenology and hermeneutics (Biggerstaff,& Thompson, 2008; Brocki,& Wearden, 2006; Smith 2004; Smith, 2010). The phenomenological nature of IPA, as described by the phenomenologist and founder of the phenomenological approach, Edmund Husserl (Larkin, Watts, & Clifton, 2009), indicates an interest in understanding experience in its own right rather than attempting to define it in terms of pre-existing abstract categories (Smith, 2004; Smith et al., 2009). A differentiation between 'experience', that is being immersed in the everyday flow of experience and 'an experience', which involves awareness of this flow of experience by the individual and its personal significance, is pointed out by Smith et al. (2009). These authors propose that the individual is able to increase their awareness through engaging with these experiences through the process of reflecting upon, thinking and feeling about them. Although the aim of IPA is to get as close to this inside world of the participant as possible it is explicitly acknowledged within this approach that such an understanding will never be direct or complete (Smith, 1996; Smith, & Osborn, 2003). This acknowledgement is informed by the hermeneutical underpinnings of this approach (Smith et al., 2009). Hermeneutics refers to a branch of knowledge which is concerned with interpretation (Biggerstaff,& Thompson, 2008; Silverman, 2010). The term "hermeneutics" which was first coined by the German philosopher Wilhelm Dilthey to refer to a method, distinct from those of the natural sciences, which facilitated the interpretation of the intentions and meaning associated with human behaviour, speech and writing (The Oxford Dictionary of Psychology, 2009). The proposition that understanding of the participant's life-world will never be direct or complete is based on the fact that it is coloured by the researcher's own understanding which can then only be achieved through interpretation (Smith, & Osborn, 2003). This is the proposed double hermeneutic where 1) the participant is attempting to understand and relate their own experiences and 2) the researcher is trying to make sense of the participant's understanding (Smith, & Osborn, 2003). IPA researchers then need to make sense of the way in which the participant makes

sense of their own experience. This process of thinking about thinking is referred to as a double hermeneutic and is a core component of the approach.

Smith and Osborn (2003) mention two of the possible hermeneutical stances which are used in IPA as empathic and questioning hermeneutics. These are used collaboratively as the researcher seeks to explore what the experience is like from the perspective of the participant while at the same time being allowed to examine this experience critically, exploring conscious and unconscious motives behind individuals related experiences. This approach to interpretation gives credence to the complexity of individuals and acknowledges that what they choose to disclose may be influenced by many factors, not least the experience of participating in a research study. The degree to which empathic and questioning hermeneutics will be balanced is determined according to Smith and Osborn by the nature of the study.

Finally, IPA differentiates itself from historically favoured nomothetic approaches in its concern with the idiographic, that is, the particulars of individual experience (Larkin et al., 2006; Smith, 2004; Smith et al, 2009). The aim of IPA studies is thus not to produce findings which may be generalized to populations of the sample under study but rather to understand individual experiences of a particular phenomenon. Generalisations or comparisons across cases can be made to a degree but only once each case has been explored sufficiently. Larkin et al. (2006) offer first and secondary aims of IPA analysis. They state the aim of the initial analysis phase to be a production of a logical third party description of the participants' experience which is also psychologically informed. The subjective nature of the findings produced is explicitly acknowledged in IPA and hence referred to as 'third party' description or 'interpretations'. This relates to both the phenomenological and hermeneutic underpinnings of the approach mentioned earlier. Heidegger (reported in Larkin et al., 2006), a phenomenologist drawing on the works on Edmund Husserl, proposed that there is no truly 'objective' reality, as per our current understanding of it, simply due to the fact that the world and phenomena which researchers explore only have meaning in relation to the individual. In other words, it is impossible to extract the individual or oneself from the phenomenon which one wishes to study as we inform this phenomenon at the simplest level by the meaning and significance which we attribute to it (by selecting it as an area to be studied). As the subjectivity of this method of inquiry has been tacitly acknowledged, inquiry then focuses on the importance of understanding the individual within their context as opposed to trying to negate or minimise contextual factors. Having explicitly acknowledged and accepted the

impossibility of a purely 'objective' psychological analysis by the researcher or a true 'first hand' account of participant experience, the IPA researcher seeks to make use of the hermeneutical underpinnings of this approach to provide a psychological description by the researcher which keeps as closely to the experience of the participant as possible. Larkin et al. (2006) propose however that simply describing participant experience is insufficient in IPA. These authors propose that an interpretative analysis which not only positions the initial description contextually, but is also informed by existing theoretical constructs is necessary to fully utilise this approach. According to Reid, Flowers and Larkin (2005), IPA offers an avenue for applied use of generated findings. The above-mentioned authors also suggest that in the interpretation of the data, the researcher may approach it in a way that is designed to answer a specific research question.

This study has thus been conducted using a qualitative research design and has specifically used the approach of an Interpretative phenomenological analysis. This method of inquiry was specifically selected due to the nature of the research question. As mentioned in the previous chapter, several theories exist regarding the nature of the phenomenon of PIU and several criteria have been debated as to what constitutes this phenomenon, yet none appear to have explored the specific experiences of individuals who feel that their Internet use is problematic. In light of the fact that the very existence of the phenomenon has been questioned due to the lack of consensus of symptomatology which constitutes the disorder, IPA was considered to be the most appropriate method of inquiry into the experiences of those individuals who subjectively defined their Internet use as problematic, irrespective of proposed diagnostic criterion. The research question, participant recruitment methods, interview style and analysis have thus all been approached in a manner consistent with this epistemology.

3.4 Method

3.4.1 Sampling and sample size

In keeping with the orientation of IPA as a paradigm, that is, its interest in particular individual experiences, a small, purposively selected sample is recommended (Larkin et al., 2006; Smith, & Osborn, 2003; Smith et al., 2009). Smith et al. (2009) propose a rough guide of three to six participants in studies by novice IPA researchers. This range in sample size is hypothesized to allow the novice researcher to gather sufficient data to make comparisons, while at the same time not overwhelming the researcher with data. In contrast to sampling

strategies in nomothetic studies, IPA is not concerned with obtaining a sample representative of the population, but rather one that is representative of a particular perspective. This relates back to the idiographic orientation of the IPA approach (Reid et al., 2005; Smith, & Osborn, 2003). It is for this reason that an additional recommendation is the recruitment of a homogenous group as possible with regard to factors other than experience of the phenomenon under study (Smith, & Osborn, 2003; Smith et al., 2009). These include pertinent social or theoretical factors. This is suggested in order to facilitate a detailed examination of psychological variability within the phenomenon under study, through the examination of convergence and divergence patterns in the data (Smith et al., 2009). Acknowledgement of the difficulty associated with recruiting homogenous samples is however made within these guidelines and in such cases, pragmatic alternatives are offered. This includes suggestion of an expanded inclusion criteria (Smith et al., 2009). Smith and Osborne (2003) also acknowledge the practical necessity of simply interviewing those individuals who are willing and able to participate in one's study.

A small relatively homogenous group of individuals with self-reported problematic Internet use were recruited for this study. The sample of participants was gathered using a purposive sampling technique as per the above recommendations. Participants were accessed through referrals by fellow psychologists as well as through snowball techniques. Participant One responded to an advertisement placed on campus by the principal researcher and following the interview gave the contact details of the researcher to two other individuals, one of whom made contact with the researcher and became Participant Two in the study. Participant Three and Four were informed about the research study by colleagues of the principal researcher and contacted the principal researcher via email expressing their respective interest in participation. All of the above-mentioned participants experienced their internet use as problematic in some way. This was the inclusion criteria used for the study. The actual sample aimed to comprise at least five participants. This is consistent with the recommended sample size range for IPA research projects conducted by students as noted above (Smith et al., 2009). Two individuals who expressed interest in the study however chose not to participate in the study. For this reason as well as time constraints, a total of four participants were interviewed. Despite this drawback, the sample size was still within the recommended parameters and sufficient material was obtained in each of the four interviews to enable a detailed analysis.

3.4.2 Data Collection

Due to the nature of the research design, that is a qualitative, IPA study, one-to-one interviewing was selected as the data collection method. Reid et al. (2005) suggest that this type of interviewing "allow(s) participants to think, speak and be heard" (p.22), as well as offering practical advantages such as being easy to manage and facilitating the development of rapport between the researcher and participant. This is in line with the purpose of the study which is to explore in-depth and particular experiences of individuals with subjectively defined PIU. Individual semi-structured interviews were selected as the specific structure for the interview as recommended by Reid et al. (2005). While Greef (2002) maintains that no method of interviewing is superior to any other, he suggests that the best guide for selection of the method be the purpose of the research. Individual compared to group interviews for example, provide more detailed information about each interviewee (Morgan,& Krueger, 1998); a goal that is in line with IPA research. Semi-structured or guided interviews involve the use of a basic checklist to ensure that all the topics of interest are covered by the researcher and are considered useful when information regarding specific topics is sought (Greef, 2002). This style of interviewing provides a middle ground between the un-structuredness of the informal conversational interview and the rigidity of the standardised open-ended interview. This is consistent with the recommendation in IPA literature which suggests a flexible interview style (Smith et al., 2009). This is done with the aim of allowing the interviewer to be guided by the concerns and experiential expertise of the participant, thereby facilitating an understanding of the "life-world" of the participant, and adhering to the inductive epistemological principles of IPA (Smith et al., 2009).The guided interview approach allowed the researcher to elicit richly detailed information from participants while still maintaining that this information was relevant to the topic under study.

Reference is made in IPA texts to a process of 'active listening' when conducting interviews (Seidman, 2012; Smith et al., 2009). Seidman (2012) provides a detailed description of active listening as characterized by three levels. At the first level, the interviewer is encouraged to listen carefully and attentively so as to internalize the content of the participant's speech, allowing the researcher to refer back to important topics or areas which he/she is interested in exploring further. Secondly, the researcher is advised to pay careful attention to the way in which participant's word their experiences. Seidman proposes that by doing so the interviewer may be able to distinguish guarded or impersonal communication by the participant and find ways to access more personal introspective experiences. On the final

level, sensitivity to process (as opposed to content) factors is advised. These include factors such as time elapsed/ remaining, energy levels of the participant and non-verbal communication by the participant. Similar guidelines for interviewing are mentioned by Smith et al. (2009) as well as related techniques of in interview note-taking, clarification with the participant to ensure clear understanding, and empathic exploration to facilitate richly detailed accounts by participants. The interview style used is informed by the earlier mentioned distinction by Smith et al. (2009) between 'experience' and 'an experience'. Through active listening and exploration with the participant, the researcher is able to facilitate reflection on experience, thereby fostering and gaining access to a more personally significant/ richer phenomenological account by the participant.

Data was collected through individual semi-structured interviews. Interviews were conducted at the Psychology Clinic at Rhodes University. These interviews were conducted, recorded and transcribed by the principal researcher. Each interview lasted approximately one hour and each was roughly guided by an interview schedule (see Appendix D). This means that although all the topics in the interview schedule were covered for each participant, this was not done so in a sequential or systematic manner. The interviewer rather allowed the discussion to be guided by the flow of the participant's narrative. Participants were also allowed to express experiences which did not directly relate to questions on the interview schedule. This was consistent with Smith et al.'s (2009) guidelines for interviewing. Recordings were securely stored electronically with access available only to the principal researcher. Each interview was then transcribed by the principal researcher, and once again stored securely, using pseudonyms for participants. Recordings were erased once each interview had been transcribed.

3.4.3 Data Analysis

Smith et al. (2009) stresses the subjective nature of the analysis. This is due to the very nature of IPA which involves the researcher's interpretations of what the participant is thinking. The systematic and procedural natures of the analysis as well as the explicit acknowledgment of this subjectivity ensure that these factors do not severely detract from the validity of the results obtained. This will however be discussed in greater detail later. This systemization of analysis is tentative as Smith et al. (2009) also stress the importance of flexibility in the analytic process due to the iterative nature of the analysis.

Both first and second order analyses were conducted on the data generated. Larkin et al. (2006) recommend this approach in conducting an IPA study as it facilitates a richer understanding of the phenomenon under study. The purpose of the initial analysis as stated above is the production of a logical, psychologically informed third party description of the participants' experience while the purpose of the second order analysis involves the positioning of the initial description in a broader social, cultural and theoretical context. In this study the second order analyses will take the form of analysis and comparison of first order descriptive data with the cognitive theories discussed in the literature review. Being a first time IPA researcher, the principal researcher followed the basic guidelines provided by the same author while also working under supervision of a more experienced IPA researcher. This is consistent with the recommendations put forward by Smith et al. (2009) for novice IPA researchers although creativity and innovation in the analytic procedure is advised where possible and where the researcher feels comfortable doing so. The following are advised as step-wise guidelines to the analytic process: (1) reading and re-reading transcripts; (2) initial noting; (3) developing emergent themes; (4) searching for connections across emergent themes; (5) moving to the next case; and (6) looking for patterns across cases. The initial step involves immersion in the interview transcripts to facilitate a deeper engagement with the content and with the participants' experiences of their worlds. In step two, the researcher notes anything of interest. Smith et al. maintain that there are no rules for what the analyst should or should not select and comment on regarding the content of the transcripts. The researcher therefore identified and took note of the appraisals, behaviours and emotions of the participants which are made evident in the transcripts. In step three data is reorganized into themes using the exploratory commenting done in step two. Step four involves a mapping of how the analyst thinks the themes relate to each other. Smith et al. suggest that the themes included here are in part informed by the nature of the research question. The process is then repeated with the next case and interview transcript till all cases have been analysed in this manner. Finally, connections are sought out between the various cases. This may involve some reviewing or re-ordering of individually generated themes where the analyst sees fit.

3.5 Validity

Yardley (as cited in Smith et. al., 2009) outlines a set of criteria for establishing validity in qualitative research designs. These principles include sensitivity to context, commitment and

rigour of research, transparency and coherence, and impact and importance. Smith et al. (2009) offer some suggestions as to how these principles may be adapted to and satisfactorily met within the context of IPA research. As these factors often overlap in practice, suggestions by Smith et al. (2009) will be briefly discussed by stages of the research process.

In the initial stage, the researcher is expected to be aware of and familiar with both literature on the topic under study (substantive) as well as literature on the foundational principles of the research method being used (theoretical) in order to facilitate a sensitivity to context (Smith et al., 2009). Familiarity with theoretical literature will impact on each stage of the research process and how it is carried out while substantive literature will impact greatly on both the focus of the study and the resultant discussion based on findings. It is therefore important that current, relevant literature be accessed.

At the methodological stage, rigour can be demonstrated through selection of a sample appropriate to the research question under study. Transparency of the research process can also be demonstrated at this stage through a detailed and clear outline of each stage of the research process. As an added measure, Smith et al. (2009) advise making explicit the finer details of the study such as what the interview schedule was informed by and how interviews were conducted.

At the data collection stage, sensitivity to context is largely informed by the guidelines mentioned above for conducting a good interview (Smith et al., 2009). Through attentiveness, empathic interaction and sensitive exploration, it is reasoned that material obtained from the interview will be representative of the participant's experience. These Interview skills also inform the principle of commitment and rigour as attentiveness and commitment to conducting a good interview will result in a rich experiential account from participants.

At the analytic stage, careful attention to the analytic process as well as immersion in the data is considered to be indicative of both sensitivity to context and rigour in research (Smith et al., 2009). Use of verbatim extracts is considered exceptionally important when making reference to themes or in support of assertions by the researcher. By supporting one's arguments with the words of one's participants, researchers may also demonstrate sensitivity to context as well as rigour in the analytic process.

Lastly, a good, clear, and compelling write-up which tells the reader something interesting and important is considered to demonstrate the principles of sensitivity to context, coherence and impact and importance (Smith et al., 2009). Smith et al. propose that these attributes are often noticed by the reader, but that the researcher may also monitor this through rereading or reviewing his/her own work with these principles in mind.

Finally, Yin (cited in Smith et al., 2009) proposes that the researcher keep systematic records throughout the research process so that should another researcher go through these records, he/she would be able to find a plausible link between the start of the research process to the findings obtained at the end. This is referred to as the 'independent audit'.

As an intern in Clinical Psychology, the principal researcher was able to practice many of the skills recommended for IPA interviewing and hence a greater sensitivity to context as well as commitment particularly in this area. The principal researcher was also supervised by a more experienced supervising researcher, particularly in the field of IPA. As a result of this, the principal researcher was able to check the validity of her own assumptions and conclusions. The supervisor in this case served as the independent reader mentioned by Smith et al.(2009). Constant drafting and redrafting of each chapter was carried out, particularly the literature review to accommodate phenomena encountered in the analysis phase. This iterative approach to the study ensured considerable familiarity with literature (both substantive and theoretical) and with participant data.

3.6 Ethical Considerations

Prior to commencement of this study a proposal was submitted to the Psychology Department's Proposal and Ethical Review Committee for ethical review. The proposed topic for study as well as the procedures to be used were cleared by this committee before any participant recruitment and/or data collection could be done (See Appendix A).

Participants were accessed through advertisements and word of mouth. This was in keeping with accepted methods of sampling associated with this research design and permission for advertising was sought out from the relevant authorities prior to advertisement. All participants were over the age of 18 and informed consent was obtained from participants both at the stage where they expressed interest in participation and prior to each interview. Participants were each provided with an information sheet containing information regarding

the study (see Appendix B) as well as information regarding recording and storage of research material (see Appendix C), information on what the material will be used for and assurances of anonymity in the write-up of the study. Contact details of the principal and supervising researchers were included on this sheet and participants were urged to make use of these should they have any concerns following the interview process. This information was also explained verbally by the researcher to ensure participant understanding. This is consistent with the specifications for informed consent detailed in Smith et al. (2009).

In terms of the primary ethical principles of non-maleficence and beneficence, no foreseeable harmful effects were predicted as a result of the study. Although suggestions made in the literature which propose that PIU qualifies as or is related to underlying psychopathology (Davis, 2001; Young, 1999) may lead some to disagree with this, the researcher maintains that these once again are merely conceptual models which have not been established in participant experience. It is for this reason among others that this research is considered important. Nevertheless, necessary precautions were taken by the researcher to minimise any foreseeable harmful effects on participants. The questions constructed in the interview schedule were suitably broad to allow participants to decide the depth of the information which they were comfortable with providing. Although further questioning was necessary in order to facilitate exploration of the experiences related by participants, this was done in an empathic and tentative manner. The principal researcher was however consciously alert to cues during interviews which might indicate that certain issues being discussed were difficult for the participant. The principal researcher's training as a clinical psychologist was once again considered to be an advantage in this regard. Participants were additionally urged to contact the researchers post-interview as mentioned above, should they experience any distress.

With regard to benefits of the study to the participants, no monetary reward was offered. Two of the four participants however expressed that their interest in the study partially related to an interest in possibly helping inform others regarding a phenomenon that they considered important and having a significant impact on their lives. Findings will be made available to participants upon completion of the study. In sum, the predicted benefits to participants as a result of the study was considered to outweigh any foreseeable costs. One important benefit was considered the provision of an opportunity to relate their experience of PIU which is not formally recognized as a disorder in existing diagnostic nomenclature, a factor which renders some mental health professionals to dismiss this or attempt to explain it under pre-existing

disorders (Balt, 2012). An additional benefit is that this research will add to and hopefully aid in improving existing literature on PIU. All interview recordings were erased following transcription of the data and interview transcripts were stored safely in a locked facility with access to the content made available only to the principal researcher and supervising researcher. Pseudonyms have been used in the write up of the study and no overtly identifying information was used in the study to ensure anonymity of participants.

Chapter 4: Findings and discussion

4.1 Introduction

This chapter comprises a brief description of the participants involved in the study and a subsequent presentation of the major findings which emerged from the analysis. These findings have been grouped under four superordinate themes, namely that of Escapism, Social Insecurity & Validation, Perfectionism and Self-control. Each theme involves a presentation of participant extracts from interviews, a discussion of the extract as interpreted by the principal researcher, and a link to relevant findings in previous studies where necessary. Finally, implications for theoretical models of PIU will be discussed in relation to the findings.

4.2 Description of Participants

The participants involved in this study were all students at a local university, in different years of academic study. They were also of different ages, ranging from the youngest participant at 19 years of age and the oldest at 22. Each of the participants were espectively involved in completing different degrees. Three of the four participants described being from middle-class two-parent households and one participant described being from a middle-class single parent household. Participant One was the only female participant involved in the study and was also the only participant who experienced social networking sites as her primary problem with Internet use. The remaining participants were male and all reported online gaming as their main area of concern with regard to PIU. Two of the four participants had made use of professional psychological services to address their PIU while the remaining two participants had sought no formal help with regard to this.

4.3 Themes

Two main domains of Internet use emerged out of the analysis. These were the use of social networking sites and online gaming. Four major themes or common experiences emerged across the interviews in relation to this. These themes appeared to be independent of the type of Internet application used.

4.3.1 Theme one: Psychological Escapism

The theme of Escapism is one which features prominently through the transcripts. This theme includes use of the Internet to escape from academic responsibilities and dysphoric emotions through avoidance and distraction by the Internet and is consistent with the phenomenology

of escapism described by LaRose et al. (2003). These authors specifically mention anxiety, guilt and depression as the dysphoric mood states which are most commonly avoided, as well as the phenomenon of escapism often being seen as a feature of PIU.

> **P2:** ***When I get into a game, I get very into it, which, you know – it's a form of escapism. Due to events of the past and that kind of thing, I tended to get more into my games than the average person. Instead of just playing the game I'd be visualising myself in that world – you know, the character I am playing there is me there. Which is why I have a tendency to go toward role-playing games where I can create my character and do whatever there. Now you see for regular games like – you've heard of Prince of Persia right? Like Prince of Persia, that's ten hours of game-play. Okay. It's lovely, it's amazing, but it doesn't satisfy me to – once I'm finished with it I can play it a second time, but the third time I can't. Whereas the sandbox style role playing games, I can keep going at it, going at it (pause) and the game that I currently – well the last game I spent my time fan-boy-ing over was SkyRoom. Two hundred hours worth of game-play. Plus with the new – the new add-ons, its three-hundred hours of game-play – I finished the game twice. With two completely different characters which I used to embody two different parts of myself.***

This theme appeared to vary in intensity across the experience of participants. Participant Two for instance appeared to experience this phenomenon of escapism more intently than the other three participants as will later be seen. Participant Two appeared to be insightful as to his use of Internet gaming for the purpose of escapism. The remaining two participants who also admitted to predominant use of gaming on the Internet also appeared to use gaming as a means of escapism, although to a different degree. Participants Three and Four admitted to use of online role-playing games as well but did not seem to have the same investment in these games as Participant Two, preferring games which offered shorter term gratification in terms of winning or end-result. This need for instant reward will be explored in greater detail under a separate theme further on in the discussion. Participant Two could be seen to further dissociate from his responsibilities or negative emotions through embodying himself as a different person through the use of role-play in these aforementioned games. The role of fantasy as a function of escapism is generally discussed in the literature in relation to online sexual addictions (Young, 2008; Praterelli, Browne, & Johnson, 1999). Praterelli et al. (1999) proposed that individuals who use the Internet for sexual gratification and/or social gains tend

to be shy or introverted individuals who use the medium as a means to express fantasies which they might otherwise not be able to. These findings are thought to be equally applicable in this case however. Participant Two goes on to further discuss this function of escapism, which clearly developed as a means of avoiding the distress associated with his parents' divorce.

> ***P2 – Now, I was in (pause) Grade 10. That made me – how old was I then – sixteen. Right, now at the time, my parents had just divorced, so I kinda see it as something I used to keep my mind off real things. I also played a lot of soccer as another form of escapism. [...]***

> ***P2 - ... With all the things going on with all the divorce decrees and that going on – ok obviously there's some emotional trauma there. I did keep every – I was probably the only one with a completely level head the entire time because I wasn't paying attention to most of the things that were going on around me. I knew what was going on but - at the same time I'm busy playing, at the same time I'm able to keep a level head. I don't think about things too much. At the same time if something happened I could get up and just work through it and you know, be there for everyone.***

The experiences of the above participant is consistent with findings that online gaming is used as a means of coping with trait and state anxiety, particularly among college students as well as a tendency toward greater online gaming use in response to external anxiety (state) factors (Mehroof & Griffiths, 2010). This is noted from the participant's account of the way in which he dealt with his parents' divorce and his reference to 'all the divorce decrees' and 'emotional trauma'; that is, through submerging himself in the gaming world. The suggestion by these authors that university students may make use of online gaming technology in order to cope with immediate or temporary emotional arousal is supported by the above extracts. This was also found to be the case with the remaining participants who related experiences of using the Internet in response to anxiety, feeling down or frustrated. This can be seen in the excerpts that follow.

> ***P3 – Sometimes like I mean uh... I eventually got very upset about my marks and knowing, geez I got this assignment due I haven't started it... Err, what am I going to do, I'm panicking, it's due in a couple days – Argh! I'm going to play computer games. Similar to like a – I don't want to say a drug addiction but***

erm (pause) an escape. Kind of thing. Umm, and ja, that was a problem for me in my first two years, was um... gaming for me was an escape from all my commitments and work. Which (pause) didn't help. At all.

Participant Three's relation of this occurrence to the interviewer communicated a considerable sense of stress or anxiety experienced in these situations. His description is interpreted to be indicative of the severity and impact of his problematic Internet use on his psychological wellbeing and his academic performance. This is particularly noted in his reluctant comparison of his Internet use to an addiction. It is noteworthy that the alternative that he proposes to this description of his Internet use as a 'drug addiction' is 'an escape'. The implication here is understood to be the habit forming nature of using the Internet as a means of escaping reality. His reference to 'first two years' alludes to the start of his university studies which is when this type of Internet use seems to have begun. As with the previous excerpt, the implication here is that Participant Three uses online gaming in order to cope with, or avoid, the stress associated with academic commitments. Participant Four relates a similar experience of dealing with frustration and disappointment which he experiences, through use of the Internet.

P4 - I mean I even considered playing StarCraft – which is the game I'm sponsored for – I consider that like work. If I'm having a rough time, like if I've lost two games in a row; I'll log off and go on like YouTube and I'm like "it's fine, I'll go play now now" (laughs). It's the exact same with work it's like "huh huh, I'll do that later huh huh... I'm going to watch YouTube quick". And I think I burnt two hours once, just watching cat videos. And the next thing I look at the time and I'm just like (mock snicker) "<u>what</u> have I done?!".

Participant Four here identifies with the theme of escapism mentioned by the other three participants, and also demonstrates how pervasive this behaviour is. He mentions using another Internet application, namely *YouTube*, to distract himself when he faces disappointments in the gaming world. This suggests firstly that this behaviour is independent of specific applications (such as gaming or social networking), but additionally that it is a consistent manner in which this participant deals with psychological or emotional difficulties. As further support of the premise that the phenomenon of psychological escapism appears to occur independently of any specific application, an additional excerpt from Participant One, the only female and non-gamer in the study, is included.

P1 – Ja, 'cause in the afternoon when I came back I like took a nap and I said no ok for like maybe one hour id like just relax and I found something and I was doing online shopping. And then from there I went onto Pinterest again and then (smiles) with the different kinds of interests that you have like you just want to click and you know, see where it takes you and I was like uh.. you know what (pause) err (pause) I'm going to go for a walk just now so let me just, you know, go for another hour on the Internet and then I'll do work. And I just carried on procrastinating. And then I had completely forgotten in fact that we had work to do. So because work – if you compare work and sitting on the Internet, sitting on the Internet is much more fun so I would prefer to sit on the Internet than do work and I just completely forgot.

The experiences of the all the participants interviewed regarding this theme appears to be closely related to descriptions or conceptualisations of escapism in the literature (LaRose et al., 2003; Young, 2008). Young (2008) lists common ways in which escapism is achieved in the context of online sexual addiction. These include: (1) avoidance of dysphoric emotions; (2) establishing interpersonal/romantic/sexual relationships online: and (3) use of the Internet as a substitution for dealing with what underlies other addictions. All of the participants appear to use the phenomenon of escapism in the first way described by Young. Internet applications, in this case either gaming or social media/networking sites are used when the individual is faced with uncomfortable and distressing emotions. As mentioned earlier, anxiety has in past studies been specifically identified as a factor which motivated Internet use in university students (Mehroof & Griffiths, 2010). In terms of the two types of anxiety mentioned by these authors, that is, trait and state anxiety, the participants in this study appeared to use the Internet primarily in response to external factors or state anxiety. This was again consistent with the findings of the above mentioned authors. Factors relating to trait anxiety were not specifically explored in this study although some speculation will be made with regard to this later on in the discussion, under the theme of perfectionism. This type of Internet use is explained as a means of numbing negative emotions and/or filling an emotional void (Peele & Brodsky, 2000). This is hypothesized by Young (2008) to enhance the individual's positive perceptions of the Internet, reinforcing it as a coping mechanism. The second feature of escapism described by Young is better elaborated upon in the next theme.

4.3.2 Theme two: Social Insecurity and Validation

A related theme that emerged from interviews was that of a sense of social insecurity or inadequacy and a related reliance on the Internet as a medium through which to gain approval. Several authors speak of the link between social anxiety/shyness and PIU (Young, 2008; Davis, 2001; Praterelli et al., 1999). This is related to the theme of escapism in that the socially anxious individual is able to establish meaningful relationships online and thereby escape feelings of loneliness or inadequacy in face to face interactions (Young, 2008; Davis, 2001). All of the participants in this study displayed or reported a sensitivity and insecurity with regard to interpersonal relating. A subtheme of this was noted in the role of online gaming in helping these participants to overcome this through linking them to other individuals with similar interests. Online applications also appeared to provide a medium through which the individual could attain a sense of importance, value and positive feedback through both the gaming world ad virtual social networks.

4.3.2.1 Social insecurity and identity:

> ***P3 – And I've only really had one or two good high-school friends. I was a bit – I was a bit socially awkward in highschool. And ja. There were only two guys I really got along with. And the one guy lives fairly close to me so I mean – when I'm home I often go visit him and we (brief pause) play computer games together (laughs). 'Cause he also games.***

From this excerpt we can see that Participant Three has had previous difficulty in establishing face to face social relationships. It is therefore a reasonable assumption that his identity as a gamer provides him with a sense of distinction as well as an accepted and valued explanation for this. Gaming also appears to facilitate the establishment of other social relationships for this participant. As will be seen in the discussion to follow, all three of the participants who were involved in online gaming appeared to derive a sense of positive identity and exclusivity through their involvement in the gaming world. This was particularly the case with the participants who played competitively. This exclusivity related to the perception that online gaming, particularly in competitive or ranked gaming was a skill which was not possessed by many. Participant Two seemed to obtain a sense of validation from his fantasy roles within games in addition to this. All of the gamer participants also took great pride in their technological adeptness and general high intellect while Participant One appeared to seek out this sense of approval/validation through social networking sites.

P1 – And um, it's that unbiased opinion that um, mainly attracts you to someone that's not – who's not physical basically. It gives you (pause) it's like your secret identity. I don't know. I just feel it makes it easier to talk to someone who you haven't seen you know. Like they don't judge you.

N – That's such an interesting way to describe it like, "not physical". Umm, ja. And the secret identity – what's that like for you, having the option of a secret identity?

P1 – I think if you like err (pause) if you look at your profile picture, you know, you'd always want to put a nice one. And then if you look at every day, like you don't have time to you know, straighten your hair or put make-up every single day. And then if um, someone sees you, you know, your profile picture, they'll be like "oh my God, I can't believe it's you", 'cause you look so different. Now when you're talking to that person you know, you don't have (pause) you don't have that pressure you know, to always look good. So you know you can (pause) you can just be in your pyjamas and looking totally untidy and talking to them. But you know, they'd have this image of you as your profile picture is basically. And they won't be passing comments about umm (pause) "Oh you know, why can't you dress like this every day?" or "Why don't you straighten your hair?", or "Why don't you do something different?", you know. Or the type of clothes you wear (pause) you know? So because its – you don't have this physical interaction, they're not so judgemental or vain as such. Basically.

This excerpt is thought to possibly be indicative of a sense of insecurity held by the participant regarding her physical appearance. She appears to fear negative social judgement which is perhaps related to a fear of disappointing others. Her carefully selected avatar or display picture seems to aid in sustaining the 'secret identity' that she mentions which in turn protects her from both negative social judgement and disappointing others. This insecurity seems to stem from a sense of needing to be perfect and her appraisal of her daily appearance as less than perfect. These appraisals and expectations will be looked at in more detail in the next theme. She appears to expect negative social appraisal from face to face interactions. Her use of the phrase 'secret identity' suggests that she gains a sense of power and control through these online interactions, possibly through her control over what online friends see of her (mentioned above) and relatedly by nature of the anonymity provided by the Internet.

This secret identity appears to allow her to present a carefully designed version of herself to online friends with whom she does not have offline relationships. This potential created by the Internet for the establishment of alternate or 'parallel' identities has been suggested by Young (1997) as an important factor in the development of Internet addiction.

There appear to be both advantages and disadvantages to this type of Internet use. The proposed sense of power and control which the participant's 'secret identity' engenders seems to contribute to her feelings of increased intimacy and open communication in these purely online relationships. In other words, she appears to feel secure enough in these interactions to allow herself to be more open in her interactions; likely due to the fact that her physical appearance cannot be judged (negatively). The disadvantage of this for the participant however is that these relationships appear to be limited to online interaction for the same reasons listed above. She is therefore not provided with the opportunity to further these relationships or to disconfirm the beliefs/fears she holds regarding negative social appraisal. While this participant reported a circle of offline friendships as well, it is hypothesised that she will be less intimate in these interactions, limiting the potential for these relationships to disconfirm her negative beliefs. Although the seemingly obvious fear by the participant relates to judgement of her physical appearance, this is thought to be just one operationalisation of deeper beliefs of not being good enough. This will be discussed in more detail in relation to perfectionism later.

This notion of secret or alternate identities is one that emerges explicitly only in one other interview, that of Participant Two, which will be examined last in this subtheme. A more pervasive subtheme among all participants involved in online gaming was a sense of a positive identity derived from belonging to the gaming community.

> ***P3 - Umm, ja. Probably not. But our interaction is mostly online. And (pause) I mean general society would not deem that as sociable but I mean for us that's fine. Umm (pause) and (pause) often we do – we don't just do online gaming – I mean like we'll have a board games night at somebody's house. Umm (pause) or (pause) we'll watch some terrible movies somewhere at somebody else's house. So (pause) I mean whether we're socialising online by playing games together or socialising by doing other things (pause) to us that's one and the same thing. I know, I know society generally doesn't see it that way. But for us that is socialising.***

Participant Three makes a distinction here between his community of gamers and "general society". This is interpreted as the participant considering himself as different from others, both possibly in a positive and negative light. He mentions earlier being "socially awkward" in high school and a sense of not really belonging or fitting in was interpreted based on other experiences related by the participant throughout the interview. He however appears to have found a more positive identity as a gamer upon entering university. This in turn appears to facilitate his online gaming usage. This theme emerges, slightly less explicitly, throughout the interview, as well as in other interviews. An additional point of interest in this excerpt is Participant Three's rejection of the commonplace distinction between online and offline socialising. To this Participant, they appear to be one and the same, a concept that seems to be shared by his community of gamer-friends. This is similar to propositions made in previous studies that MMORPG users hold a different view of socialising to traditional concepts; involving a preference for online socialising within the gaming world (Ng & Wiemer-Hastings, 2005).

N - It sounds like gaming has been an interest of yours for a long time. And just coming to university and having the high speed Internet (P3: mmm... ja) and not having...

P3 - Or, or other people to play with that you see on a regular basis

N - Ja.

P3 - And it's not just random people – its people you get to see on a regular basis and become friends with and stuff. And then playing with them, also it's a lot more fun.

N - Aha. And do you know them from game society?

P3 - Ja. Pretty much. Most of my friends I know from gaming. Not all of them obviously, but most of them I know from gaming.

The participant's reiteration of the significance of having friends that are gamers was thought to be suggestive of the salient role of belonging to a group of individuals with the same interests in the development of this participant's PIU. The sense of belonging and identification with this group which pervades the interview comes across strongly in this excerpt. Virtual community membership has been theorised to appeal to the same needs for

affiliation and belonging as that offered by traditional offline group memberships (Ridings,& Gefen, 2004). Ridings and Gefen (2004) additionally found that information exchange, social support and friendship were important factors in individuals joining online communities. Similar findings in the literature indicate that online relationships provide the individual with a perceived acceptance and sense of belonging, particularly in the case of socially anxious individuals (Young, 2008; Davis, 2001). In the case of Participant Three however, this support and community membership is not limited to online interaction. On the basis of their shared interest in gaming, many of the participant's online friendships and social connections appear to translate into close offline relationships too.

> ***P2 - League of legends, Ja. It's the biggest, thing, online multiplayer game. 14 million players, it's actually an Olympic sport now. Right, so, I was introduced to the game in February, I've been playing it since. There's three of my friends that – there's two of my friends that thing, in (pause) in my res who play it. One guy is (pause) halfway to becoming a professional. Another guy started after me, so we're kind of on the same kind of... thing. So it's – we've developed a bit of a community. Gamers as such – I'll always be able to – Anyone from GameSoc I can talk to. 'Cause we're all gamers so we can talk about anything. We're all – you know, we're all predominantly friendly to – to each other.***

As mentioned earlier, this sense of acceptance and belonging within the gaming community is one that is seen across the three participants involved in online gaming as supported by this extract from Participant Two. 'GameSoc' as mentioned by Participant Two is a reference to the Gaming Society at the university. A more subtle but important distinction of this identity as a gamer can be noted from the language used by the gamer-participants. These include abbreviations, references and terminology which supposedly one would have to be a fellow gamer to understand. This will be elaborated on below. Participant Two derives more than just a positive sense of identity from membership to this group; he also appears to derive a sense of importance from his fantasy roles online.

> ***P2 – [...] So it's a case of – even though I'm doing all these gigantic things that can – I do find it relaxing because at the same time I'm still having fun with (pause) being me in a different place. I mean completely, SkyRoom's entire draw is that I am (pause) something else. I'm not me. I mean I am me, but I am in this mythical world of 'Thambrion'. I am busy fighting dragons. I am in the***

dragon world and the 'Dovarchy' and I am killing off dragons that are destroying the world. And that gives me a bit of, you know – well not a sense of importance because in the game there's only like five people who really really acknowledge that you are the chosen one and all that kind of thing. But it gives me a sense of um, how do I say – it allows me to experience another side of life[...] Or from my darker side, when I join, thing when I joined the dark brotherhood which are an assassins guild, seeing how I could assassinate – you know, I recruit creative ways to assassinate people in specific, in specific manners so I wasn't detected. When I was playing World of WarCraft, I used to be an assassin for hire, or thing. I also used to be the alchemist of the server. Well alchemy was a skill you know; you combine a couple of herbs and make potions and that kind of thing. You know, it actually sounds kind of weird that I'm doing a daily, routinely activity that I actually find very boring in real life there. But I make my gold by sending out things of "if you want a potion, just send me a message – you have to give me the ingredients though and I can make it for you". If it's, if – depending on thing, I can make it for you but I'll sell it to you for a price or whatever. So you know, it also gave me a bit of – a small feeling of importance, in World of WarCraft, it gave me a small feeling of importance that I was able to establish myself as this is me. Everyone knows me. Everyone on the server knows me now I am the best person at making said potions and that kind of thing. I am the best assassin on this server. If you need me to get rid of somebody that's been attacking you and that, I can do that. Or in one instance, I even decided to go as the Superhero of Justice for the – because people have a tendency of getting to a higher level and gong to low level areas and just killing people for no good reason. So I'd sit – I'd make sure that people – because people that do that are usually around level 50. I'm at level 70, I can kill you very easy. So I'll sit there, I'll make sure that I'm stealth and all that so you can't see me. And the second I see you going towards somebody at a level then I pounce. So I also do that. That was in my spare time, when I wasn't actually doing things to improve my own character.

Participant Two acknowledges here the sense of importance which he derives from his alternate fantasy identities within the gaming world. His skill within the gaming world

appears to provide him with a sense of validation and importance, something that he possibly perceives he is missing in the real world. This speculation is made based on the emphasis placed by the participant both in this excerpt and in various other points in the interview of being recognised and renowned by others. This is similar to findings in the literature of an engendered sense of recognition and power experienced through fantasy characters in users of MUD's (Young, 1997). The fantastical and far removed nature of the virtual world which he chooses to immerse himself in is thought to aid this in terms of the escapism which it facilitates. The vast difference of this fantasy world (and these fantasy skills) from the real-world in which, the researcher speculates, he experiences himself as inferior or lacking in some way, perhaps creates the opportunity for him to view himself differently. While this may be seen as a positive outcome, particularly in the role online gaming plays in enhancing the participant's self-image, the associated disadvantage to this is that offline reality may prove dissatisfying to him. Additionally, this may serve to maintain this participant's PIU in that online gaming provides him with something that offline reality cannot. While Participants Three and Four do not appear to place much importance on the anonymity or potential for alternate identities provided by the Internet, their respective statuses or ranks as competitive gamers appear to serve a similar function.

> ***P4 - In the team game, I don't, I don't play – I don't get fun out of it if I play it at a not-serious level. Its... you can either play it at a pub level, where people just kind of do what they want, and nothing serious, and people – excuse my language – people dick around. And if you play it at a serious level, like that's when it's done properly, there's coordination, you win coz you're a good player or you lose coz the other team is better than you. [...]I have a notebook for my other two games where I write down different stuff. And um, actually there's a thing called the DGC which is the Do Gaming Championships, held at rage expo in Joberg, which is where I went not – ja, not last weekend, but the weekend before. Like I got fully sponsored up for Starcraft. Like I take that quite seriously.***

Once again a sense of differentiation as a gamer and still a further differentiation between 'serious gamers' and people that 'dick around' can be noted here. There is an unspoken implication of the former being an elite group and a sense of value and importance being attached to this status. This can be seen more clearly in the next excerpt in which the participant describes the Do Gaming Championships in more detail.

*P4 - It was so awesome. I got tons of free stuff. I think like five thousand to six thousand rands of free stuff. Its – I was - I was amongst... Cause like for Starcraft 2, they invite 24 players. Which means like 24 best players in the country. Which is really like – being there is really like "yeaah!". It's pretty cool. Um, and then that alone – there's tons of different games there. So its proper teams for each of the games and stuff. And just – you're in a place where there's other people like you that take – it's referred to as E-sports. And they take it seriously. And they're trying to do the best they can. And it's like – you're surrounded by people who have the same goal as you. Like they want to improve in the game that they play. They enjoy it, they love it, they take it seriously. So that – just that whole experience was super-awesome. Like I got – I got to meet the top guys in Starcraft in the country. I got to meet them there and stuff and that was – just chatting to them and stuff about different kinds of plays and strats and stuff. I mean at Rhodes I chat to my friends and stuff about that one five man team game – but we're not that good at that. Like we wouldn't make it to rage or DGC with that game. Because it's more of a pub level. So I can talk to them about it but it's more like friends just talking about like rugby type thing. But Starcraft 2, I'm the only one that plays it at the level I do. I mean there's a couple other but – I mean they're great guys, but they're awful at the game. And like I can't really chat to them about it. I still have my friends and stuff – most of my friends are in Cape Town. And we use team-speak which is Internet relay chat – we use- we use that like every day. I mean I chat to them every day. My best mate, uh, *Felix– his nickname is *Fee. He also went up for rage. And I mean I chat to him every day of the week because we're on teamspeak.[...]*

Once again a sense of eliteness can be seen in this participant's description of the Do-Gaming Championships and the distinction or differentiation between serious gamers and others is made explicit. This participant's use of gaming language and abbreviations (such as 'strats' for strategies) as noted in the earlier excerpt of Participant Two is also thought to be significant. As mentioned earlier, this appears to be used by the gaming participants as a means of making distinct their membership to the in-group; that is, the society of gamers. In the context of this excerpt, this use of gaming-speak also appears to reflect an accompanying sense of superiority over both those who are perceived as less skilled within this grouping

and those outside of this grouping.A similar sense of personal superiority was seen in Participant Two in relation to his identity as a gamer. This was corroborated by a paternalistic style of interaction by Participant Two during interviews; for instance, by using gaming jargon during the interview and thereafter asking the interviewer if she understood the terminology. Another point to be noted in this excerpt is the tension between Participant Four's acknowledgement of the problems associated with his gaming over-use with the value that he places on his talent for gaming; a perceived rare skill. Participant Four also communicates both explicitly and in his interaction with the interviewer a need for social recognition. Finally, an excerpt from Participant three provides an insight into the way in which value or validation is obtained from online gaming.

> **P3** - ***Umm... I suppose it's the same with any competitive anything. Umm... knowing that you're better than your peers- or knowing that you're better than other people competing against you in the same thing. I mean I don't run around and gloat and say "Yay, I'm best, I'm better than all of you! Blah blah blah...". But it's just self – self satisfying. Like I played a game of Counter-Strike and I was by far the best player on my team because I had the most kills or... I did the most amount of work kind-of thing. You know it's the same as, I suppose it's the same as a sports match you know. You win the match, it feels good, you know. Cause your better than everyone else (pause) kind-of-thing. Ja and with computer games that gratification is instant.***

From the description provided above by Participant Three, gaming appears to provide an avenue for instant feedback and a measure of one's performance. The reason that this is thought to provide validation is because of the value placed on it not only by the participant but also by the gaming community to which he belongs; both friends and other online players will recognise this. While this provides an explanation for the 'how' in terms of the validation offered by online gaming, it does not answer the 'why'. The participant's choice of words ''cause you're better than everyone else" in addition to the general focus in this excerpt on being 'best' communicates a sense of over-concern with superiority. This is speculated to be compensatory in nature. As noted with the remaining gaming participants, this emphasis on communicating or proving superiority is proposed to stem from deeper underlying negative beliefs; perhaps a fear that they are lacking or inadequate in some way. Although this is speculatory, some basis for such speculation can be found in earlier indications by participants regarding feelings of social insecurity.

P1 - umm.. well I haven't actually met a *lot* of friends through the Internet. But there was a guy who invited – he had a friend who had the same name as me and he invited me by mistake – and uh, he was from another country, I can't even remember. And then we just started talking. And you know like, messages came regularly, like I would find out about his country and he would find out about mine. And what's happening, and what's happening in your life. And you know, it becomes so much more easier to talk to this person because you know, he's so far away. And you know, he's not going to judge you. like you know, it's totally unbiased. It just becomes so much more easier to.. to talk to that person I think.

N - Why do you think it's easier and there isn't that kind of judgement? What do you think it is about....

P1 - I think it's because they don't know you, so they haven't really formed like you know, an opinion of you. So you feel like you can tell them anything. Like even if like – say for instance if umm (pause) you walk into the door. And you tell your friend and they're like "ah you're such a retard! How can you have not seen?", like you know, "the door is right there". And if you tell it to someone else, you'd get a different opinion. Like or (pause) or sometimes you're just having a bad day. So um, you just feel – like sometimes if you tell a friend they can be quite judgmental, and like "oh you know, you're not the only one having a bad day" and you know "everyone goes through this". And if you tell it to someone else they'd be more sympathetic basically.

Although Participant One claims that meeting people online is not something which she engages in often, these online acquaintances appear to be more valuable to her than she admits. This is interpreted from her comparison of these online relationships to her experiences in real life face to face relationships. From her description, these online relationships appear to provide predominantly a sense of emotional validation. This is related to the earlier suggestion made with regard to this participant's fear of being judged and is thought to be related to the speculated fears held by the gaming participants. Similarly to Participants Two, Three, and Four; Participant One is speculated to hold negative beliefs which underlie her fear of being judged. Instead of using compensatory strategies which

promote a sense of superiority however, she appears to compensate by using the Internet as a 'safe' way to form new relationships.

This theme relates to Young's (2008) explanation of problematic Internet use in the context of online sex addiction and escapism as mentioned at the end of theme one. Young proposed that one of the reasons why individuals use the Internet to establish sexual/romantic/interpersonal relationships as opposed to doing so face-to-face is that the anonymity provided by online interaction provides several benefits for the socially anxious user. These include a decreased ability to detect rejection or disapproval, perceived acceptance and a sense of belonging by other individuals with similar interests (usually accessed through chat-rooms), and the increased sense of intimacy facilitated through this. Social anxiety was not defined in the literature referenced (with regard to PIU) and none of the participants involved in this study displayed any overt indicators of social anxiety as classified in the DSM 5 (APA, 2013). From the experiences related by these participants however, each of the individuals appear to have experienced a sense of self-doubt, social awkwardness or feeling of not belonging. It is for this reason that this theme has been termed social insecurity as opposed to social anxiety. Despite this minor differentiation, the above-mentioned findings appear to be relatively consistent with participant experiences in so far as participants were found to use Internet applications to facilitate the establishment of social relationships, particularly friendships. The manner in which these relationships were established was however more complex than described in the literature. Participant one appeared to be the only participant who explicitly made use of the anonymity provided on social networking sites in order to establish relationships, both platonic and romantic. The remaining three participants appeared to use online gaming indirectly in the establishment of relationships. Relationships in the gaming community appeared to be facilitated by a common interest in online gaming and extended to the creation of a social circle both online and offline. In his cognitive behavioural theory of PIU, Davis (2001) speaks of the use of the Internet by individuals to gain more positive responses from others. Even though Participant Three mentions that the gaming community can often be quite harsh in their interaction with one another, Internet gaming also appears to be an area in which the participant experiences validation for a skill-set. As much as participants are aware of their problematic use of the Internet, they also appear to gain a sense of validation and importance from this status and/or proficiency. This appears to be a common phenomenon among Internet gamers, particularly those who game competitively as was the case with three of the four participants. In the case

of Participant Two, he appeared to additionally gain validation from skills obtained using online game personas and from the recognition of these skills by other individuals in the virtual world. Participant One did not use this feature of the Internet - that is online gaming - at all and the phenomenon of competitiveness was not noted. She did however appear to use social media communication for avoidance of criticism and negative social appraisal. As mentioned above she also appears to experience a sense of emotional validation from these interactions.

For these participants as well as participant two, gaming and consequently one's identity as a gamer is perceived as a positive and somewhat exclusive membership. In the case of Participant One, her usage of social networking sites can clearly be seen to be an avoidance of disapproval/ rejection associated with face to face relationships. This especially appears to be the case in the context of romantic relationships. The distance provided by social networking sites, including what she refers to as individuals who are "not physical" thus seemingly allows her to be less concerned with her own physicality and be more open in her interactions. This finding is consistent with that of Young (2008). All four of the participants seem to experience the acceptance and sense of validation which Young speaks of, although this is apparent in different ways and to different degrees with each of the individuals. The remainder of the participants appear to find this sense of importance and belonging in the virtual gaming world, not just online, but in offline social circles too. In relation to this sense of importance, an element of superiority was also noted in the descriptions and interactions of the gamer participants. Although the social anxiety that the authors (Young, 2008; Davis, 2001; Praterelli et al., 1999) speak of is not present to the same degree, there is a definite sense of social insecurity, once again present to different degrees, but evident in the experiences of all participants. Both the use of the Internet as a safety mechanism in establishing new social relationships as well as the communicated sense of superiority by the gamer participants are suggested to be compensatory in nature; both attempts at ameliorating an underlying insecurity with regard to self-worth. None of the participants appear to have neglected face to face relationships as a result of online relationships. Participants who engage in online gaming do however seem to either establish many of their friendships from meeting people in this way and/or spend much of their time socialising with other gamers.

4.3.3 Theme three: Perfectionism

All of the participants expressed beliefs and behaviours associated with maladaptive perfectionism. Two of the participants appeared to be socialised into the language and

understanding of psychology through the experience of psychology and were therefore able to explicitly acknowledge their perfectionistic traits. While the remaining two participants did not explicitly state this perfectionism, evidence of perfectionistic thinking emerged consistently throughout their interviews in terms of characteristics of perfectionism (Hamachek, 1978; Lehmann,& Konstam, 2011; Nyland, 2004; Page, Bruch,& Haase, 2008) and associated cognitive distortions (Craske, 2010)

> ***P1 – I think if you like err (pause) if you look at your profile picture, you know, you'd always want to put a nice one. And then if you look at every day, like you don't have time to you know, straighten your hair or put make-up every single day. And then if um, someone sees you, you know, your profile picture, they'll be like "oh my God, I can't believe it's you!", 'cause you look so different. Now when you're talking to that person you know, you don't have (pause) you don't have that pressure you know, to always look good. So you know you can (pause) you can just be in your pyjamas and looking totally untidy and talking to them. But you know, they'd have this image of you as your profile picture is basically. And they won't be passing comments about umm (pause) "oh you know, why can't you dress like this every day?" or "why don't you straighten your hair?", or "why don't you do something different?", you know. Or the type of clothes you wear (pause) you know? So because its – you don't have this physical interaction, they're not so judgemental or vain as such. Basically.***

This excerpt is interpreted as being indicative of a sense of insecurity held by the participant with regard to her physical appearance, as mentioned in the previous theme. This insecurity as previously speculated was thought to be related to self-doubt and unrealistically high standards set by the participant for herself. This was indicated by her emphasis on the "pressure" to always look good. At several other points in the interview, this participant also conveys a sense of importance placed on outward physical appearance. Although the excerpt relates to the participant's concern with her physical appearance, this theme also emerged in the participant's relation to other aspects of her life such as her academic performance and is thus thought to be indicative of a pervasive pattern. Her use of depersonalized language during the interview when speaking of her loss of control over her Internet use as well as when speaking about other things which appear to make her feel vulnerable was also considered as a facet of her preoccupation with appearing perfect. This participant's emphasis on the word 'pressure' is also thought to be indicative of the distress caused by these

unrelenting high standards. This is consistent with findings in the literature associating maladaptive perfectionism with psychological distress (Flett et al., 1998; Hewitt et al., 2003). This excerpt supports the hypothesis proposed by Lehmann and Konstam (2011) which posits that the potential created by the Internet for the creation of a perfect persona is one factor which may draw individuals with maladaptive perfectionism to use of the medium.

N: You sound like a bit of a perfectionist. Would you agree with that?

P3: Ja. (sigh) Umm (pause) I would say so ja. To me either do something properly or don't do it at all. Kind of thing. Uh (pause) ja. I would, even if I did manage to hand in an essay (pause) or something like that. I'd know, ag this is a crap essay, it's not good – but I don't have a choice, its due in 5 minutes- kind of thing. And (pause) again I would just be angry at myself even more. Knowing that I really didn't put any effort into this essay, or studying for this test or whatever the case is. Whereas if I'd done it properly, and I know I'd studied for it – then ja, id feel good and I'm A-for-away. But ja. Like you said, I'm a bit of a perfectionist. And you know, for me a perfect gaming session, I suppose, is coming away with a win. So that's why I always will strive for it – kind of thing. If that makes sense (small laugh).

The label of perfectionism was offered here in response to a consistent theme in the participant's speech of being disappointed in, or angry at, himself subsequent to performance that he perceived as poor. This is consistent with the core criteria of maladaptive perfectionism mentioned in the literature, namely inflexibly high standards for oneself (or others) (Hamachek, 1978; Nyland, 2004; Page et al., 2008; Radhu et al., 2012), self-doubt prior to and post decision making (Nyland, 2004; Page et al., 2008) and an over-criticalness of one's own performance (Hamachek, 1978; Radhu et al., 2012). This perfectionism appears to influence Participant Three's gaming use. He described in an earlier extract his experience of falling behind on academic work, becoming stressed and anxious and using online gaming as a means of escaping these dysphoric feelings, leading him to neglect his academic responsibilities further and become increasingly stressed and anxious. This is thought to be related to findings in the literature of an association between avoidance and perfectionism (Santanello,& Gardner, 2007). Findings with regard to the relationship between avoidance and perfectionism vary. Santanello and Gardner (2007) found that experiential avoidance

plays a partial mediating role between maladaptive perfectionism and worry. Experiential avoidance is described in the literature as "involve(ing) attempts to avoid uncomfortable internal experiences by trying to suppress or control these unpleasant private events and/or avoid the situations that produce them" (Santanello,& Gardner, 2007; p. 319). Other literature suggests that individuals with self-oriented perfectionism (defined similarly to the definition of maladaptive perfectionism provided) experience approach/avoidance conflicts (Randles et al., 2010). These authors describe this as a conflict between active and avoidant approaches taken to anxiety with active approaches such as working excessively seen at the active end of the spectrum in an attempt to avoid failure. Other authors see this as two sides of the same coin suggesting that both excessive/constant work engagement and procrastination as both being indicative of avoidance; either of the negative internal experiences (thoughts and feelings associated with failure) suggested above or the situations in which these perfectionistic thoughts and feelings may arise. Literature suggests that perfectionists employ one of two strategies in response to worry/anxiety namely investment of excessive time and energy in completing a task or alternatively avoiding engagement with, or not completing tasks(Santanello & Gardner, 2007). This participant's perfectionism appears to influence his gaming in that he seeks to prove himself or achieve what he refers to as 'a perfect gaming session' which possibly contributes further to his PIU. This is explained more clearly in the next excerpt.

> ***P3 - Ja. And also – I don't know, what I also found was really gripping – or is really gripping about the Internet is the sort of instant satisfaction. A game of whatever will last about half an hour, forty-five minutes and then you start a new , a new round. And (pause) I mean it's unlike something you know... like academic where the reward comes when you get your marks at the end of the semester. And it's instantly gratifying when you play a game and you win. And you know you haven't beaten the computer, you've beaten somebody else online. It's, it's satisfying. It's like winning a match. A sports match. It's the same sort of gratification. That I think is also attributed to ADD. Cause I'm Add and always seeking that instant satisfaction rather than long-term sort of things. Umm ja so that - that's the one thing that also adds to it.***
>
> ***N - OK. Can you tell me more about the instant gratification? What is it that you find so gratifying about it?***

P3 - (puffs out air) Umm... I suppose it's the same with any competitive anything. Umm (pause) knowing that your better than your peers- or knowing that you're better than other people competing against you in the same thing. I mean I don't run around and gloat and say "Yay, I'm best, I'm better than all of you! Blah blah blah...". But it's just self – self satisfying. Like I played a game of Counterstrike and I was by far the best player on my team because I had the most kills or (pause) I did the most amount of work kind-of thing. You know it's the same as, I suppose it's the same as a sports match you know. You win the match, it feels good, you know. Cause you're better than everyone else (pause) kind-of-thing. Ja and with computer games that gratification is instant. Ans also what I found, is if you play a lot - if you're losing a game, you then feel... And also the general gaming community; for the most part they're not a pleasant bunch. They're very insulting at times, if a person's winning, you know, they'll rub it in and they'll... throw insults at you and tell you you're bad and so on. And then if you do end up losing then you're like " dammit I need to get - I need to go back and try again" And.. Ja, coz you start a new game. Play that one, maybe lose that one and now you're angry. And now you want to carry on going till you prove that you've won kind-of-thing. And also I found for me that was a big thing. Like losing and wanting to go straight back in and trying to win (pause) kind-of-thing.

The concept of instant satisfaction comes up quite often in three of the four participant interviews and is pervasive in this interview particularly. The attribution of this need for instant gratification seen in this excerpt is one that was echoed by another participant. It is noteworthy that this participant, along with one other provide a biological explanation, at least initially for the driving force behind their PIU. This is possibly an attempt to externalise responsibility for their problematic Internet usage. Chappell et al. (2006) proposed a similar hypothesis in a study of excessive users of the MMORPG game *Everquest.* These authors suggested that the addiction 'narrative' was one way in which participants may excuse their own behaviour and evade personal blame/responsibility. Participant three compares his investment in online gaming to his lack of investment in his academics and offers the explanation that the extended time taken to see feedback on his performance with regard to academics is de-motivating. Contrastingly, in the gaming world he is able to gain that sense of reward (of a win) in a relatively short period of time. The sense of needing to prove

oneself is seen strongly in the experiences of all the gamers interviewed, as mentioned in the previous theme. The effect of gaming usage in influencing the participant's mood can also be noted here. A 'perfect gaming session' and the sense of accomplishment associated with this appears to be quite rewarding whilst a loss and possibly perceived failure engenders anger (at himself) and consequently further investment in proving himself by continued gaming. This phenomenon of 'mood modification' as defined in the literature is one that has been associated with PIU (Hall,& Parsons, 2001; Ng,& Wiemer-Hastings, 2005; Young, 2008). All three factors including Participant Three's excessive striving for a 'perfect gaming session, his externalised attribution of his excessive gaming to ADD and his further engagement in gaming when he fails to prove himself are all thought to be reflective of the phenomenon of experiential avoidance described above (Santanello,& Gardner, 2007). This sense of constantly trying to improve oneself is not restricted to the gaming world. All four participants appear to experience this to a greater or lesser degree.

> ***P4 - And I kind of tell myself, it's like – well if it's a combination of the three tests, I'm just going to need about an hour max to go through the MCQ's from each test and just learn those. And, that's exactly what I did and I ended up getting 76. Which – (laughs) when I saw my mark I was like "that's not bad", but I know that when I answered there was some stuff I knew that I just answered incorrectly and I was like, dammit. Um, also I have kind of this perfection complex about me. I'm – I'm working on it really hard, but it used to be like if I didn't get a mark that put it – that I wanted – id be like, "I failed life, time to just go cry in a corner".***

Participant Four describes here his performance on a test which he procrastinated in studying for. It is evident in this excerpt that Participant Four has very high expectations of himself. He also appears to display a cognitive appraisal referred to as 'dichotomous thinking', that is, a tendency to think in all-or-nothing or polarized terms (Craske, 2010). This is seen for example in his appraisal of 'I failed life' if he did not achieve a desired academic result. This perceived 'failure' relates not just to his unsatisfactory academic performance but to his general competence (or lack thereof). These and other cognitive distortions were noted among the remaining participants as can be seen in the excerpt below.

Based on the above excerpts, maladaptive perfectionism appears to influence and be influenced by PIU in several ways. This includes the role of Internet applications in fostering

a sense of validation in these individuals. This seeking of external validation is proposed to be related to the feelings of self-doubt or inadequacy noted among these participants; a feature associated with perfectionism (Nyland, 2004; Page et al., 2008). Use of online applications is also thought to relate to the phenomenon of avoidance investigated in the literature in relation to perfectionism (Randles et al., 2010; Santanello,& Gardner, 2007). Each of the participants described above appeared to achieve this avoidance of both offline commitments and negative emotions through the mechanisms described by these authors. The participants appeared to either invest excessive time in online applications which would provide them with validation (and thereby avoid negative thoughts/feelings about themself) or avoid offline commitments such as academics or relationships (through immersion in online applications) for fear or failing or not being good enough.

4.3.4 Theme Four: Control

A related theme that emerged was that of Control. This incorporated both actual loss of control and fear of losing control. Participants expressed a strong sense of fear with regard to loss of control. Findings in the literature suggest a relationship between perfectionism, stress and control (Achtziger & Bayer, 2013) as well as between self-control and PIU (Hofmann, Vos,& Baumeister, 2012a; Kim et al., 2008; Mehroof & Griffiths, 2010). For this reason, elements from the previous theme of Perfectionism will be drawn into the discussion where appropriate.

> ***P2 - But when I'm angry, I don't play the game league of legends when I'm angry because when I'm angry I make bad decisions. So I'll play a game like SkyRoom or something like that where I can always just redo redo redo redo... in a couple of seconds. Just as a way to get myself in a regular state of mind. Because I hate not being in – it's a small thing of mine – I hate not being in complete control of myself. So I'm happy, when I'm angry – I even hate, hate, having a crush on somebody because that makes me act like an idiot. Like really, sometimes I'd literally go up to a girl, ask her out, knowing that I will get rejected, just so I can stop being like that (smiles). [...]***

Similarly to Participant Three mentioned in the previous theme, it can be seen how Participant Two uses online gaming for the purpose of mood modification. The intolerance of intense emotions seen in these participants relates to findings in a previous study that indicate that perfectionists use suppression (as opposed to cognitive reappraisal) as a means of

emotional regulation (Nyland, 2004). Individuals with PIU were also found in various studies to be intolerant of intense or dysphoric emotions (LaRose et al., 2003; Mehroof,& Griffiths, 2010) and relatedly showed low impulse control (Dong et al., 2010; Saville et al., 2010) and lowered self-control (Kim et al., 2008; Mehroof,& Griffiths, 2010; Niculović et al., 2012; Odacı,& Kalkan, 2010). Participant Two also appeared to use different online games/activities as well as different offline behaviours for the regulation of different mood states. The sense of impulsivity mentioned above can be seen both in the participant's statement that he makes bad decisions when angry as well as his description of asking a girl out knowing he will be rejected. This impulsivity therefore appears to manifest in both his online and offline behaviours. The appeal of the online world in regulating these intolerable emotional states can be seen in this excerpt. The participant mentions that the game SkyRoom provides him with the opportunity to constantly undo mistakes he has made within the game which appears to facilitate a sense of control and possibly relieves him of anxiety. This maladaptive attempt at gaining a sense of control can once again be seen in his example of his approach to getting over a crush. While both behaviours may provide the participant with a sense of control and ease his anxiety, his online behaviour likely contributes to his problematic use of the Internet while his offline behaviour likely contributes to his feelings of social and interpersonal insecurity. A similar phenomenon was seen with Participant four.

> ***P4 - Ja. Especially YouTube. YouTube burns a lot of hours (laughs). Hours of my life (laughs). Cause I used to be pretty ill-disciplined in terms of like studying and just... doing work. I mean I even considered playing StarCraft – which is the game I'm sponsored for – I consider that like work. If I'm having a rough time, like if I've lost two games in a row; I'll log off and go on like YouTube and I'm like "it's fine, I'll go play now now" (laughs). It's the exact same with work it's like "huh huh, I'll do that later huh huh... I'm going to watch YouTube quick". And I think I burnt two hours once, just watching cat videos. And the next thing I look at the time and I'm just like (mock snicker) " what have I done". But ja, pretty much entertainment purposes.***

Once again it can be seen how participants appear to use different Internet applications for avoidance of different mood states. Participant Four who mentions earlier, using gaming as an escape from feeling bad about academics, describes here how he uses *YouTube* as a distraction from facing his disappointments in the gaming world. Despite this loss of control over Internet usage as described above by both Participants Two and Four, all of the

participants appeared to demonstrate a preoccupation with control over their own emotions and behaviour.

> ***N-[...] Um, and in terms of this small thing you have with control – how small is that?***
>
> ***P2: Umm, even anaesthetic annoys me. Although I take it because I know I have to but ja, it annoys me. I get a sense of panic when one of my limbs goes slightly numb. Well not a big sense of panic, but more a thing of – when one of my limbs goes numb I'm like ok, it's a small annoyance but when more than one goes numb I start worrying about it. At that point in time – I have a knee injury on my right knee – but the one time after (prayer), I was getting up and my knee went (stands up to demonstrate) sort of like that. And my knee went in again. So I felt, you know, I felt the pain of that so I thing, instinctively pushed myself up and leaned on the person next to me. So the person next to me is like "what the hell are you doing?" and I'm like "I'm sorry, my leg is numb and I couldn't really (pray). So ja – it makes me react in strange ways sometimes but it's like a small phobia I guess, of just not being in control of myself. I mean sleeping pills – I don't take sleeping pills even. I can sit with insomnia, I don't mind that, because I can – because I keep (pause) it allows me to do things practical while I'm awake. But for me to... to lose control of something – my body is something that I'm completely in control of. For me to lose the ability to, you know, use it, I mean... that just worries me.***

Participant Two's seeming over-reaction to what appeared to be his leg falling asleep appears to be indicative of catastrophic thinking, a cognitive distortion characterised by predicting the worst outcome of a situation without factual evidence to support this (Craske, 2010). This participant also mentions not using sleeping pills and later mentions not smoking or using any illicit drugs as a result of this unwillingness to lose control over his mind/body. This sense of preoccupation with control appears to be pervasive with this participant and is suggested to be accounted forby dysfunctional cognitions such as catastrophic thinking. It is additionally suggested that these catastrophic distortions contribute to this participant's Internet use. The virtual world appears to provide him with a sense of control which may serve to ease the anxiety associated with his maladaptive cognitions.

P1 - Umm, usually you know, you'd meet the person and you'd keep meeting them to get to know them. But now because you have Facebook, so you know if that person invites you then you know you'd communicate through Facebook. So basically you can find out almost anything about somebody on Facebook. You'd see their pictures or if they're checking into some place you can see. Or you know, if his, if for example your boyfriend – or you're getting to know him- then if another girl comments on his wall. Then you can see like how often she talks to him. And you know, you can gauge from there like you know, if there's something going on or like, you know, if you should invest your time basically. Umm, Facebook actually replaces those various kind of meetings where you actually could like, physically talk to the person. So um, sometimes that's what happens. You know, you'd rather use Facebook because you know it saves you all that time and energy. Instead of you know, when you're falling like, head-over-heels and you're like no, you know, you really like this person and then umm... If you just carry on meeting them and you don't do your background check. Like you know, you can find out things that you could have found out earlier. And um, it could, um, kind of protect you in the future if there's (pause) basically instead of you investing all your time and effort. So you know, I would prefer to find out from you know, - you do your background check first and you decide – is it actually worthwhile investing this time in to that person. You know? Before actually putting all that effort into something. 'Cause you know, you prefer to put your effort into something that you know is going to work. Not into something that you know a few weeks down the line is going to, is not going to work, you know? Why invest time in something that won't work out.

Participant One's reasons for using online applications to establish relationships has already been explored in previous themes. Within this however, she appears to express continued anxiety over rejection. As a result she appears to express a preoccupation with staying in control of the relationship and her emotional investment in it. One way in which she assumes this control is through monitoring the posts of individuals in whom she has a romantic interest. In a study on *Facebook* use and jealousy in romantic/sexual relationships, *Facebook* related jealousy in these relationships was found to increase with *Facebook* use (Muise et al., 2009). One of the complications of this reported by the authors was the capacity for misinterpretation of information viewed by individuals on their partners Facebook profiles

due to a lack of context. This is suggested to be a likely phenomenon with Participant One. As with Participant Two above, this is thought to relate to self-doubt and underlying cognitive distortions. Participant One's admitted assumptions made based on abstract information found on individual's profiles could be suggestive of any of the following cognitive distortions: selective abstraction (attending to only specific and generally negative details of a situation), mind reading (assuming another's thoughts/ attitudes without evidence), and possibly catastrophising as mentioned above (Craske, 2010). These cognitive distortions are then likely maintained and exacerbated by this participant's use of *Facebook* which is possibly seen as confirmatory, leading her to further reliance on *Facebook* for this purpose. Additionally, both Participant One and Participant Two appear to be attracted to the Internet for the control that it offers over both social relations and validation. While this may be effective in ameliorating the anxiety of these participants in relation to their social anxiety or speculated feelings of inferiority, it is proposed the advantages associated with this perceived control are short-term in nature. Participant One's *Facebook* background checks for example may be less effective than she believes, causing her to sabotage her own potential relationships and reinforcing her insecurities of not being able to trust or not being good enough for these potential romantic interests.

> ***P4 – It's kind of the same principle I use to explain to myself why other people party so much – um – 'cause I don't party at all. Uh – I party June/July and then maybe December. It – I don't – I'm not against it. It's just not my thing. And I like saving money. But um – people – people um, always tell me like they had such a great night last night – they can't remember anything cause they got so smashed. It's like – how… how do you know you had a great night if you got totally smashed and can't remember anything. But I've been in the situation where I – I – and I hate that – where like, you can't remember anything the next morning. But I've been in that situation where like I wake up and I'm like "last night was good! What happened? I don't know – it was good though". That's what I recall from it. Umm, and then you found out you drove over a taxi (scoffs), I don't know – just a random thing and you're like, "Ahhh I'm terrible!".***

Similarly to Participant Two, Participant Four suggests an underlying fear behind his reluctance to party. His suggestion that one may recover from a night out only to find that they've "(driven) over a taxi", while facetious, is interpreted as reflective of catastrophic

distortions. This participant fears excessively negative outcomes may result as a result of his loss of control or easing up of personal standards.

> ***P3 - Usually if its someone that I've <u>just</u> met – I mean if I've met them in real life and I've chatted to them and whatever else, then ja, I'll pretty much send them a friend request or if they send me a friend invite then I'll accept it. But if it's someone that I've met through a friend then I'll probably go look them up first – not because I'm like paranoid or whatever else – I like to know <u>who</u> I'm engaging with. And um (pause) ja, so if I've met them in real life and I know them already – but if I've only just met them online and through a friend then.. then ja, I'll probably end up looking them up on Facebook. Or (pause) whatever else. But umm (pause) ja. What's that saying? Better the enemy you know than the one you don't. Umm (pause) ja. That's kind of it. I mean I'm not saying they're enemies.***

Similarly to Participant One, Participant Three appears to make use of the voyeurism provided by *Facebook* to find out about people who he might consider befriending. Although this is not for romantic reasons, it is thought to be underscored by the same factors as with participant one. As mentioned above, this can be problematic due to a lack of context to information gathered in this way. This participant's use of the term "enemy" is also considered interesting and is perhaps suggestive of a wariness in social interactions, related to a fear of being judged as with Participant One. Participant Three's use of the idiom "better the enemy you know" is also suggestive of both the threat associated with interpersonal relationships as well as the safety provided by the Internet with regard to this.

In terms of the cognitive models proposed in Chapter Two, Participant One appears to employ specific cognitive distortions which are related to the sense of negative self-appraisal proposed earlier. These cognitions could be classified in terms of the categories listed in Craske (2010) as selective abstraction (attending to only negative aspects of the situation), mind reading (assuming the attitudes/ opinions held by others without evidence) and perhaps dichotomous thinking, as defined above. A similar phenomenon was noticed in interviews with the remaining three participants. This phenomenon was expressed differently as the remaining participants mainly used the Internet for online gaming. This was however seen as an expression of the same underlying phenomenon, that is, the need for validation and control/power as seen above in the extract from Participant Two.

4.4 Discussion of implications for models

In light of the auxiliary aim of the research, implications for the theoretical models reviewed in chapter one will now be discussed in light of the above findings. For the sake of coherence, this will be discussed in the order in which the models were listed in Chapter One.

With regard to personality explanations of PIU, the strong emergence of themes of Validation, Perfectionism and Control appeared to confirm a strong personality element associated with PIU in the context of the experiences of these four participants.These themes appeared to be inter-related and interdependent. This is consistent with findings that link perfectionism and self-control (Achtziger,& Bayer, 2013) and perfectionism and PIU (Lehmann,& Konstam, 2011). Although no studies were accessed regarding the relationship between validation and PIU, participants seeking of validation on the Internet was considered to be a feature of control and perfectionism as detailed above.

All four of the participants showed strong indications of elements of maladaptive perfectionism as defined in the literature (Hamachek, 1978; Nyland, 2004; Page et al., 2008; Radhu et al., 2012). The strong theme of perfectionism that emerged is thought to possibly relate to the personality theory of Leonard and Harvey (2008) as well as the hypothesis of Lehmann and Konstam (2011) with regard to the relationship between maladaptive perfectionism and PIU. To reiterate, Lehmann and Konstam (2011) proposed that online applications provided the opportunity for creation of a 'perfect' online persona which would compensate for the discrepancy perceived by the individual between the ideal and actual self; that is, the supposed root of maladaptive perfectionism (Leonard,& Harvey, 2008). The role of these alternate identities in facilitating feelings of control and compensating for perceived insecurities was clearly noted in two of the participants. While the remaining two participants did not make significant use of alternate identities online, they also appeared to seek validation through their identity as gamers. This was seen as a related compensatory strategy to that of the aforementioned participants. It is possible that different individuals make use of different Internet functions in different ways with regard to perfectionist strivings, validation, control and PIU. It is also possible that the relationship between these personality factors and PIU is better understood through different conceptual models. This will be discussed further under implications for cognitive models.

LaRose et al.'s application of social cognitive theory (Bandura, 1991) to 'media addiction' was considered to relate well to participant experiences of PIU. The self-regulatory mechanisms of 'self-monitoring', 'judgemental process' and 'self-reaction' are thought to offer plausible explanations with regard to different patterns of usage in participants. With regard to self-monitoring for instance, two of the participants reported only seeking psychological intervention for their PIU after experiencing severe academic fallout (failing or almost failing an academic year). The remaining two participants however appeared to manage to regulate their own Internet usage to a degree and while one participant admitted to occasional lapses with regard to academic performance as a result of PIU, she appeared able to correct this (mainly through avoidance strategies) soon after. Therefore, while all participants were able to self-monitor, they appeared to engage in this to different degrees. They also seemed to differ in their abilities to assess their behaviour in relation to their goals and values as well as the time taken to react to this evaluation through behavioural change.

In the case of the three 'gamer' participants, one possible explanation for this relates to the self-reactive or reward function proposed by the LaRose et al. (2003). Since online gaming appears to provide several rewards for these individuals on various levels, this offers some insight into what makes behaviour change difficult despite acknowledgement of problematic usage through self-monitoring and recognition of this as a conflict with academic or other goals. This also relates to Participant Three's comparison of the delayed gratification offered by academic performance as compared to the instant gratification associated with online gaming. Comparative accounts from participants three and four with regard to their awareness of their Internet use and ability to regulate their behaviour pre and post intervention was also thought to offer support to this model.

Finally, the phenomenon of escapism which was proposed to be an integral factor in the development of poor self-regulatory mechanisms (LaRose et al., 2003) emerged as a major theme in the experiences of all four participants. With regard to the extent to which this use of the Internet was habitual among participants, this varied. Although all participants appeared to use avoidance/ escapism as a general way of dealing with (or not dealing with) dysphoric emotions, none of the participants appeared to use this medium exclusively. While LaRose et al. (2003) provide a social-cognitive explanation of excessive media use which appears to be relevant to the experience of participants in this study, they do not offer any insight into what may lead some individuals to continually resort to tendencies of escapism as opposed to others who tend toward this only occasionally.

The above mentioned support regarding use of Internet applications for escapism as well as the subsequent rewarding nature of this use has implications for both operant conditioning conceptualisations and Young's (1999) cognitive behavioural model. In terms of the operant conditioning model, a degree of conditioning is supported, particularly in relation to negative life consequences, from the experience of Participant Three who related becoming distressed by his increasing academic pressure, becoming anxious and automatically turning to his online gaming to avoid dealing with this. This appears to vary across the participants' experiences however as two of the participants, as mentioned above, appeared to be better able to initiate change in their behaviour in response to negative life consequences. Finally, a major finding in support of the cognitive models was that of a seemingly central role of maladaptive cognitions. Three of the four major themes, namely, Social Insecurity & Validation, Perfectionism and Control, which are considered in light of this study to be central factors in the PIU of the participants in this study, appeared to relate to underlying maladaptive cognition. This is considered to provide some support for the important role of cognitions in PIU proposed by Young (1999) and Davis (2001). However, further experiential research is required, possibly with specific focus on cognitions in order to comment further on this.

Chapter 5: Conclusion

This study attempted to explore the ways in which individuals with self-reported PIU experienced their Internet use as problematic. A small sample of four participants were interviewed with regard to this. While this research in no way claims to provide an exhaustive understanding of participant experiences of PIU, four major themes were identified across the experiences of the four participants, namely: Escapism, Social Insecurity and Validation, Perfectionism, and Control. These four themes appeared to be interlinked to a large ex ctent and will be presented as such where appropriate.

The theme of escapism was noted strongly in the Internet use of all four participants. Participants used the different Internet functions to escape/avoid negative emotions. This was consistent with studies reporting a relationship between this function of escapism, and problematic Internet or media usage (LaRose et al., 2003; Young, 2008). A major use of this type of avoidance was seen among participants in relation to academic stress and anxiety. This was consistent with the findings of Mehroof and Griffiths (2010) regarding the relationship between PIU and state anxiety. The other form of anxiety which was found to have a positive correlation with PIU was trait anxiety (Mehroof & Griffiths, 2010). Although the nature of this research did not allow for in-depth investigated of personality traits, there is some evidence to suggest that the individuals in this study have a predisposition to anxiety. This is suggested with regard to findings in a separate (but seemingly related) theme of Control. The pre-occupation with assuming and maintaining control, particularly with regard to online applications which appear to facilitate this sense of control is thought to be suggestive of an underlying anxiety among these participants.

Although participants appeared to have a preferred application which they employed in this escapism, they appeared to use other mediums for escapism too, both online and offline. This means of coping with stressors or negative emotions was therefore seen as something that was facilitated by, but would likely occur even in the absence of the Internet. The selection of the medium of the Internet was thought to relate to the instant response as well as feelings of control facilitated by the Internet (Kandell, 1999). The selection of specific online applications in the provision of these constructswas considered to relate to features associated with those specific mediums. One of the similar functions provided by both social networking and online (specifically MMORPG) games was the potential provided for the individual to

create a persona to represent him- or herself. This supports findings that the potential for alternate or parallel identities online could contribute to development of PIU (Young, 1997). The appeal of this feature of the Internet was speculated to relate both to perfectionism and control. The creation of a carefully designed parallel online identity was found to provide participants with both a sense of control and validation or importance. This was similar to findings by Young (1997) in users of MUD's who experienced a sense of control as well as recognition through the fantasy characters which they embodied.

The theme of Social Insecurity and Validation was found to link to escapism in this way. As mentioned above, two of the participants appeared to use Internet applications such as social networking sites and MMORPG's in creating parallel personas for themselves. Relationships were then established in relation to this with other online users. This appeared to be done with the aim of feeling more in control, accepted, or important as the created online persona which then facilitated easier interaction with other virtual individuals. Additionally, the anonymity provided by these applications in that online friends would never meet the 'real' individual appeared to add to this sense of security in these online relationships. This relates to the proposition by Young (2008) that an additional operationalisation of Internet escapism is the use of the medium in establishing online interpersonal/romantic/sexual connections to avoid the possibility and fear of rejection in real world interaction.

Online gaming use appeared to offer individuals an increased sense of positive identity associated with this. Instead of viewing themselves as 'socially awkward', the Internet, and online gaming in particular appeared to provide individuals with a sense of being socially 'distinct', the latter being associated with more positive connotations. This seemed to be associated with the fact that they, the gaming participants, belonged to a community of people with this shared interest. This relates to findings in the literature implicating the role of a sense of belonging created in virtual communities and PIU (Ridings,& Gefen, 2004). There was an additional sense of superiority in relation to non-gamers that was noted in the communication and interaction style of the gaming participants. This was speculated to be compensatory in nature, stemming perhaps from perceptions of not being good enough. This was further thought to relate to elements of maladaptive perfectionism noted in participants, such as self-doubt (Hamachek, 1978; Nyland, 2004; Page et al., 2008).

The above finding of a sense of validation and positive identity while created through online activities appeared to translate into offline reality as well. Among Participants One and Two,

as mentioned above, online identities were seemingly used to create a 'better' self. The feelings of acceptance and positive regard received in online relationships did not seem to translate to offline relationships however as these appeared to be inter-woven, at least in the participants perceptions, with the online role/persona. Finally, all participants were able to maintain both online and offline relationships, even when the latter were not necessarily related to the former. Gaming participants appeared not to draw distinction between online and offline socialising. This is similar to the finding by Chappell et al. (2005) that MMORPG users report doing much of their socialising online with friends. It is possible that even though online connecting is not traditionally recognised as social behaviour, it appears to be the preferred form of socialising for some individuals (Chappell et al., 2005) and does not necessarily preclude or impair offline social interactions.

Lehman and Konstam (2011) proposed that one reason why the Internet may be selected as the medium through which this maladaptive perfectionism is expressed is because of the potential it provides to create a perfect online persona. These authors proposed that this becomes problematic when the individual becomes reliant upon the Internet as a coping tool, a proposition that is echoed in other understandings of media addiction (LaRose et al., 2003). Some support for Lehmann and Konstam's (2011) hypothesis was found in this study. Participant One and Two appeared to be drawn to the opportunities provided by online applications for exploration and creation of alternate identities. While participants three and four did not appear to find the same appeal in the creation of online personas, they did appear to derive a strong sense of identification with the role or persona of being a gamer and as mentioned above, an associated air of superiority.

An additional relation between perfectionism and PIU is proposed here. Several authors have found self-doubt to be a salient characteristic of maladaptive perfectionism (Nyland, 2004; Page et al., 2008; Rice & Lopez, 2004). Individuals with maladaptive perfectionism were found to procrastinate on making decisions due to this self doubt and the related fear of making the wrong decision (Rice & Lopez, 2004). Based on the findings mentioned above regarding the way that participants use the Internet, it is proposed that use of the Internet for escapism and avoidance is related similarly to perfectionism, that is, it is used at least in the case of the four participants interviewed to aid procrastination, possibly out of a fear of failing or not meeting their own ideal standard. This is supported by literature on avoidance and perfectionism which suggests that individuals with maladaptive perfectionism either spend vast amounts of time engaged in tasks in an effort to avoid thoughts of failure, or

alternatively avoid these tasks out of a fear of failure (Santanello &Gardner, 2007). Participants were also found to engage in the former type of avoidance behaviour mentioned, that is, excessive engagement in online gaming both to avoid and in response to feelings of failure/inferiority.

Findings in the literature suggest a link between perfectionism and self-control (Achtziger & Bayer, 2013; Hofmann et al., 2012b) as well as between low self-control or impulsivity and PIU (Kim et al., 2008; Mehroof & Griffiths, 2010). The experiences of the participants in this study were consistent with these findings. All of the participants experienced difficulty with self-control in relation to their Internet use. They provided varying attributions of this phenomenon to 'temptation', 'instant gratification (and consequently inability to delay gratification) and 'ADD' (Attention Deficit Disorder). These findings of a lowered sense of self control and decreased ability to delay gratification have several possible implications. Firstly, this may explain why suppression is used by individuals with maladaptive perfectionism in order to emotionally regulate (Nyland, 2004). These individuals are possibly less able to tolerate intense dysphoric mood states and hence seek instant relief from this. Suppression of negative emotions is then used as opposed to cognitive reappraisal (suggested to be used by adaptive perfectionists) so as to avoid experiencing these negative emotions for any extended period of time. Secondly this may account for why the phenomenon of escapism emerged so strongly and pervasively throughout participant experiences. Finally, these findings are thought to relate to the selection of Internet applications as tools for coping/escapism. The inherent features of the Internet, such as fast and easy access to material/information/connections, particularly in settings such as academic institutions (where most of the participants first started to experience problematic usage) make it conducive to the aforementioned functions of instant gratification or relief, and escapism. Additionally, the Internet as a medium has been proposed to engender a sense of control in individuals (Kandell, 1999). This may hold a particular appeal to individuals who fear losing control, perhaps as is the case with individuals with trait anxiety (Mehroof& Griffiths, 2010). Despite the negative consequences which result from this maladaptive use of the Internet, including loss of control, individuals may continue to rely on this medium both to assuage underlying anxiety as well as to cope with the negative consequences associated with their problematic Internet use.

Finally, in terms of conceptual models, the model considered to be most representative of participant experiences was the social cognitive conceptualisation of 'media addiction'

(LaRose et al., 2003). This is possibly in relation to the broad nature of the model which positions excessive media usage, in this case Internet usage, as a habituated response formed secondary to other primary issues such as difficulty tolerating and regulating negative emotional states. This was thought to link most closely with experiences of participants in this study. The one shortcoming of the model however was that it failed to provide an understanding of why some individuals are susceptible to this difficulty in emotional regulation and tend toward use of media, as opposed to others. Negative self-appraisals, an associated feature of maladaptive perfectionism (Nyland, 2004), appeared to lead these individuals to make use of Internet applications for mood modification -- among other - purposes. Mood modification was thought to be facilitated through a sense of control associated with Internet use, validation received online, or through avoidance of these negative emotions. While maladaptive cognitions were identified and thought to relate to three of the major themes which emerged, further, possibly more defined exploration is needed to determine the relevance of the cognitive models in participant experiences of PIU.

5.1 Limitations

Several limitations of the study were acknowledged by the researcher. Firstly, although the sample size used was in keeping with guidelines provided for IPA studies (Smith et al., 2009), which specifically argue for the value idiographic approaches to research that shed a great deal of light on small case numbers, a slightly larger sample size may have facilitated a more greatly detailed exploration and understanding of participant experiences. An alternative to this may have been the use of multiple interviews with each participant, an approach that was not considered in this study due to limited availability of the participants and time limitations. Secondly, the principal researcher is a novice to IPA methodology. While supervision from a much more experienced IPA researcher was used, this is likely to have impacted on the nature and depth of the material collected. A related point is a reflection on the researcher's orientation on being a clinical psychologist completing her internship at the time of the research. This at times made it challenging to shift focus, particularly during analysis from a traditional psychopathological understanding to one of exploration and 'not knowing'. The abovementioned limitations however are considered to be limitations which can only necessarily be corrected by experience.

5.2 Recommendations

In light of the findings, this research has implications for how we both view and treat PIU. As mentioned above, PIU appears in light of the findings in this study to be one way which these individuals choose to cope with primary underlying difficulties. Further and more in depth exploration with regard to this is recommended. Positive implications include the role of both online and offline communities in providing support for socially awkward individuals. While in some cases this appeared to facilitate problematic usage, these communities may possibly be useful avenues through which PIU may be addressed.

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Appendix A

RHODES UNIVERSITY

DEPARTMENT OF PSYCHOLOGY
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RESEARCH PROJECTS AND ETHICS REVIEW COMMITTEE

13 March 2013

Naheeda Allie
Department of Psychology
RHODES UNIVERSITY
6140

Dear Naheeda

ETHICAL CLEARANCE OF PROJECT PSY2013/01

This letter confirms your research proposal with tracking number PSY2013/01 and title, 'Cognitions and behaviours of individuals with problematic internet use: An IPA study', served at the Research Projects and Ethics Review Committee (RPERC) of the Psychology Department of Rhodes University on 11 March 2013. The project has been given ethics clearance.

Please ensure that the RPERC is notified should any substantive change(s) be made, for whatever reason, during the research process. This includes changes in investigators.

Yours sincerely

CHAIRPERSON OF THE RPERC

Dear Participant

The purpose of this study is to explore your experience of your problematic internet use. This will be done through a single semi-structured individual interview between you and the researcher. The researcher will record this interview. The researcher will be the only one with access to the recordings and will destroy them once the study is complete. The data gathered from your interview will be analysed by the researcher and compiled with that of others into a research study. All data used including any direct quotes from the interview will be kept anonymous.

Thank you for your interest and participation. Should you have any further questions or concerns, please contact either the principal research or the supervising researcher using the details provided below.

Kind Regards

Principal Researcher

Ms. Naaheeda Allie

Intern Clinical Psychologist

Fort England Hospital

Email: n.allie@ru.ac.za

Supervising Researcher

Prof. Charles Young

Counselling Psychologist

Rhodes University, Dept. Of Psychology

Email: c.young@ru.ac.za

I the undersigned hereby consent to the abovementioned study having been provided with the above information.

Participant name

_____

Signature

_____

Date

Appendix C

Rhodes University – Department of Psychology

USE OF TAPE RECORDINGS FOR RESEARCH PURPOSES
—
PERMISSION AND RELEASE FORM

Participant name & contacts (address, phone etc)	
Name of researcher & level of research (Honours/Masters/PhD)	
Brief title of project	
Supervisor	

Declaration

(Please initial/tick blocks next to the relevant statements)

1.	*The nature of the research and the nature of my participation have been explained to me*	verbally	
		in writing	
2.	*I agree to be interviewed and to allow tape-recordings to be made of the interviews*	audiotape	
		videotape	
3.	*I agree to take part in and to allow tape-recordings to be made.*	audiotape	
		videotape	
4.	*The tape recordings may be transcribed*	without conditions	
		only by the researcher	
		by one or more nominated third parties:	
5.1	*I have been informed by the researcher that the tape recordings will be erased once the study is complete and the report has been written.*		
5.2	*OR I give permission for the tape recordings to be retained after the study and for them to utilised for the following purposes and under the following conditions:*		

Signatures

Signature of participant		*Date*
Witnessed by researcher		

Appendix D

Interview Schedule

1. Can you tell me what place internet use has in your life at the moment?

Possible prompts: What happens when you use the internet? How often? Through what medium do you access it? How do you feel when you access it?

2. Can you tell me about a recent time when you used the internet to a problematic extent?

Possible prompts: What happened? How did you feel?

3. Can you describe how Problematic Internet Use affects your relations with other people, if at all?

Possible prompts: partner, family, friends, colleagues?

4. Can you tell me how you started using the internet problematically?

Possible prompts: How long ago was this? What do you think might have caused or affected this? How did you feel about your internet use at the time?

5. Have you changed the way that you use the internet over time?

Possible prompts: In what way? Does anything affect this positively? Does anything affect this negatively?

6. What for you would be a positive development?

Possible prompts: Can your situation improve? What do you imagine this improvement feel like?

7. How would you describe yourself as a person?

Posssible prompts: How do you feel about yourself?

8. Has your problematic use of the internet changed the way that you that you think about yourself?

Possible prompts: In what ways? Do you see yourself differently now from the way you used to see yourself?

9. How do you think other people see you?

Possible prompts: partner, family, friends, colleagues?

10. How do you see yourself in the future?

Adapted from an interview schedule from a project exploring the experience of women in rehabilitation for addiction problems, cited in :

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