

**Optimism, Self-esteem, and Life Satisfaction as Predictors of
Problematic Internet Use.**

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Abstract

The number of internet users has rapidly increased in the past decade both nationally and internationally. An Irish study was carried out to examine the effects of when the internet is over used by individuals. 98 participants took part in the study over all (M=34 F=64). A multiple regression analysis was run to see if optimism self-esteem and satisfaction with life were significant predictors of problematic internet use. It was found that the predictors variables of optimism ($p = .77$) and self-esteem ($p = .25$) were not significant predictor of problematic internet use. However the satisfaction with live predictor approached significance levels ($p = .052$). An independent samples t-test also examined the difference between males and females on their scores of problematic internet use. Results of the data analysis indicated that there was also no significant difference amongst males and females ($p = .37$).

Introduction

This study aims to examine the relationship between problematic internet use, optimism, and self-esteem and life satisfaction. It will also examine how measures of problematic internet use may vary in males and females. These variables will be examined and discussed in the literature review.

First it must be noted that different studies used different terminology to describe problematic internet use. Many have referred to problematic internet behaviours as Internet addiction (Flisher, 2010, Young, 1996, Fu, Chan & Wong, 2010). However due to the lack of empirical evidence internet addiction has not yet been termed as a mental disorder. Addiction is defined by Byrne and Hills (2013) ““a persistent, compulsive dependence on a behaviour or substance”” pp.1. An ongoing debate has over the years been concerned with whether “Internet Addiction Disorder” should be included in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V). As internet availability increases the rates in which of internet usage also increase (Wang et al, 2011). Pies (2009) notes that this increased usage in some users may result in symptoms that are characteristic of substance use disorders. However internet addiction disorder was not featured in DSM-V. It was also suggested by Ronald Pies that this may be because ““the frequent appearance of internet addiction in the context of numerous comorbid conditions raises complex questions of causality”” (para 1). Considering the latter it must be considered if these individuals are suffering from a definite disorder pertaining to their internet use, or are these behaviours coping strategies in result of other underlying disorders (Shapira et al., 2003). Despite internet addiction disorder not being featured in the DSM-V, Internet gaming disorder has been considered and is listed in the “Condition for Further Study” section of the DSM-V

(APA, 2013). Compulsive internet use in the future may be referred to as an addiction but further research is needed to ensure validity (Power & Kirwin 2013). For the purpose of this research the term “internet addiction” will not be used but will be referred to as problematic internet use. This will avoid a diagnostic approach of research, but will also avoid making speculations about a supposed mental disorder that at the moment lacks validity.

The internet has become one of our most prized inventions of the 20th century. It can supply us with a wealth of knowledge, entertainment, social networking, online shopping, gambling and gaming all from the comfort of our home. However use of the internet may begin to cause problems for many people. Individuals may find themselves overspending on gambling, shopping and trading. Some people spend hours upon hours surfing the web, gaming and viewing pornography to a destructive extent. Those who struggle with serious problematic internet use find their internet use interferes with their social life, work and they also may encounter physical problems (Shinde & Patel, 2014).

In the last 10 years internet use has increased rapidly globally. In 1995 just 1% of the world’s population had an internet connection. Now nearly 10 years later this number has increased by 39%. In 2005 the internet had achieved 1 billion users worldwide, in 2010 the number of internet users climbed to 2 billion users. After only 4 years, the internet had achieved 3 billion users by 2014 (Internet Live Stats, 2014).

This internet use has also become prevalent in Irish society and has been on the rise. The Information and Communication Technology (ICT) household survey carried out in 2013 examined the ICT in Irish households for non-work related activities. It was found that 82 % of Irish households have access to internet and 61% percent reveal using the internet every day. These figures have risen by 14% since 2010 (Central Statistics Office, 2013). It is evident that there is a rise in internet usage but we must consider what the effects of this internet use are.

It has been acknowledged that generally many people use the internet everyday e.g. checking emails bank balance etc. However does this make every individual who uses the internet on a daily basis an internet addict? Most people would not think so. Excessive use of the internet may one day be considered as an addiction but for now it is not. However it must be noted that in some Asian countries such as Japan and China internet addiction is not only recognised as a disorder but also treated. Parents often send their “internet addicted” children away to military like training camps for rehabilitation (Weinstein & Lejoyeux, 2010).

Although problematic internet use is not yet recognise as an addiction it has been the focus of many research studies in the past decade many of these studies have found that excessive internet use is related to low self-esteem (Armstrong, Phillips, & Sailing, 2000), gender (Ceyhan, 2007), life satisfaction (Valenzuela & Kee, 2009 & Stepanikova, Nie, & He, 2010) and optimism levels (Lin, Ko & Whu, 2008). It is these psychological measures which will be focus of this research. Each of these will be discussed below individually.

The Role of Gender in Problematic Internet Use.

There has been a compelling amount of research in relation to problematic internet use in recent years. A large number of these studies have found that there is often a large difference in problematic internet use amongst males and females. Tsai et al (2009) carried out a study to identify the “risk factors of internet addiction”. It was found in statistical analysis that there was a positive relationship between internet addiction and neuroticism in male Chinese students. A more recent study by Ha & Hwang (2014) investigated the difference in gender on scores of problematic internet use. In this study statistical analysis was performed on the data from 56,086 Korean students, 28,712 of those who were boys and 27,374 girls. Results indicated that problematic internet use was more common in boys. However on examination of psychological health indicators found that the measures of subjective unhappiness and

depressive symptoms were related to problematic internet use in both boys and girls. Frangos, Frangos & Kiohas (2010) revealed similar findings in their research that males were more likely to be addicted to the internet compared to females. Those students who indicated signs of problematic internet use were also associated with poor academic performance. Research findings from a 2013 study by Noreen Akhter backs up these findings. It was observed in her study that problematic internet use is related to gender and poor academic performance. The findings of the above two studies additionally gain support from the 2006 study by Law Pui Man Sally.

Block (2008) has identified that internet gaming addiction as a subtype of internet addiction disorder. Internet gaming disorder has been described by the American psychological association as behaviour where individuals compulsively play online games to the extent of excluding all other interests and neglecting their academic and occupational duties. When an individual ceases online gaming some may experience withdrawal symptoms much like of that experienced in drug addiction. It has also been recognised that online gaming disorder is more prevalent in young males of Asian countries (APA, 2013). In a Chinese study 503 students were recruited in Hong Kong in order to assess their levels of gaming addiction. 94% of the participants reported gaming online, 15.6% of which confessed that they could have an addiction to online gaming. It was additionally found that gaming addiction rates were found to be higher in males especially in those with poor academic performance (Chong-Wen Wang et al, 2014).

Although problematic internet behaviour has been frequently observed to be prevalent in males, females are also at risk. Young (1996) expressed that females also can be prone to internet addiction but in different ways than males. Men have been found to use the internet to seek out their sexual fantasies and dominance by watching pornography and engaging in cybersex. Women on the contrary are said to tend to look for potential romantic partners,

friendships and overall enjoy anonymous communication. However it is noted that women do engage in sexual motivated activities on the internet like males although it is less common in females (Young, 2008).

The main body of research suggest that problematic internet use is more popular in males. However it is speculated that other psychological factors would also play a role in an individual's problematic internet use. Such psychological factor as Optimism, self-esteem and life satisfaction will now be discussed later along with gender.

Optimism and Problematic Internet Use

In (2000) Daniel Goleman asserted that optimism is a strong emotion and it is the belief/expectation that everything in an individual's life will be alright even when faced with difficulties. General findings of research concerned with the relationship between problematic internet use and optimism reveal positive correlations. Unrealistic optimism has seemed to be a recurring trend in literature concerning problematic internet use. Chapin & Coleman (2009) define optimism bias or unrealistic optimism as the instance where individuals underestimate the probability of negative events occurring to them essentially ““people tend to believe that they are better than others” (Weinstein & Klein, 1999, p.1).

A study by Campbell, Greenauer, Macaluso, & End (2007) found that internet users tend to be unrealistically optimistic in that they were found to have the perception that more positive events would occur than negative events. Those who were light users of the internet scored lower on optimism than heavy internet users. These findings have been supported by Lin, Ko & Wu's (2008) study where they found that positive outcome expectancies was found to be positively correlated with problematic internet use. Kim & David (2009) carried out two studies on compulsive internet use. In the first of these studies 314 students were examined across several psychological measures. Results of a multiple regression test found

that low self-esteem and unrealistic optimism were significant predictors of problematic internet use. Results of the second study indicated that self-esteem and anxiety were also related to problematic internet use. Often self-esteem and optimism have been found to be related to each other in this context which will be discussed later.

Another term for unrealistic optimism is optimism bias. (Korn, Dolan & Sharot, 2011) found that this optimism bias may be due to a failure in coding errors that may reduce optimism levels. However it is not yet clear how we can distinguish between realistic and unrealistic optimism or is it even possible. Some research however reports that a positive relationship between the internet use and optimism is not always the case. A study which set out to examine ““The relationship between problematic internet use and interpersonal cognitive distortions and life satisfaction in university students”” (Celik & Odaki, 2013. p505) found those with a pessimistic perception of events had scored higher on problematic internet use. Additionally males exhibited more problematic internet use than females. Although there is no clear definition of optimism and pessimism, Scheir and Carver’s (1985) understanding of these constructs are generally accepted. That is that optimism pertains to the expectation of positive outcomes and pessimism relates to the expectation of more negative outcomes. However for the purpose of this research study only the measure of optimism levels will be considered.

There are many events that can occur while online that can result in a less optimistic view of an internet user. Often online communities such as social networking sites, forums and online gaming sites can be used in a destructive manner. Although this may not be their intended function, some individuals use these sites as a medium to spread negativity. For example social networking sites are often found to be notorious for cyberbullying. (Tokunaga, 2010) defines cyberbullying as the spreading of insults/rumours via the internet and other technologies. Cyberbullying occurs over all ages however it is mostly common

amongst adolescents. A study by Dehue and colleagues (2006) examined this topic in secondary school students and found that 23% of students admit to being victims of cyberbullying at one stage in their life, a further 16% admitted to engaging in this cyberbullying. Online groups can be advantageous for those who have a minority of interests by bringing people together on a particular forum/board. However individuals can easily gain access to dieting and cutting websites (self-harming websites). On sites like these some users may be given tips and encouraged to cut themselves (Whitlock, Powers & Eckenrode, 2006). A person may also become a victim from online abuse via gaming websites where some individuals may be harassed by other online players; this is known as grieving (Power & Kirwin 2014). It is speculated that over exposure to these types of websites would impact an individual's optimism scores along with life satisfaction and self-esteem.

It has been observed in review of existing literature that optimism is often measured in conjunction with other psychological measures. An example of such a study can be found in the research of Simsek & Balaba Sali (2014). In this study optimism was featured as a sub factor of a variable called Psychological Capital. Other sub factors included resilience, hope and self-efficacy. The study itself aimed to measure the role in problematic internet use and social media membership on psychological capital. An analysis of the result found that there was negative correlation. It was additionally found that males who used the internet and social media daily for communication purposes exhibit higher scores of problematic internet use. It must be noted that there seems to be a lack of literature concerning problematic internet use and optimism. However existing research on optimism has been inconclusive, with some studies linking it to high and some to lower internet use.

Self-Esteem and Problematic Internet Use.

For many decades now self-esteem has been of particular interest in many studies. The reason for this may be that self-esteem affects many aspects of our lives from day to day. Schacter, Wegner and Gilbert (2012) define self-esteem as the sense of self-worth. Essentially self-esteem is how worthy we deem ourselves. Self-esteem may be a determining factor of how we live and the choices we make ("Raising low self-esteem - Live Well - NHS Choices," n.d.)

The formation and development of self-esteem is said to begin in childhood. Keltikongas-Jarvinen and colleagues (2003) assert that how an individual accepts, likes and values themselves begins in the childhood years. How children are supported to think about themselves and their achievements is where the grounding of self-esteem begins to develop.

Most people see high self-esteem as a desirable quality. Brown (1993) highlighted that most psychologists would agree that high self-esteem is to be accepted and valued by others. Cooley (1902) in earlier research referred to this as the "looking glass" effect, that our self-esteem is based on how we are viewed by others and our perception of how others see us. Brown & Taylor (1988) brought to our attention that people generally overestimate their good points and qualities, their control over certain situations and are unrealistically optimistic. This unrealistic optimism refers to where individuals believe that they will experience more positive events than the average person which was discussed earlier. In her (1977) study Patricia Cross found that 94% of university lecturers believed they were above average in their teaching abilities. A similar study by Kruger & Dunning (1999) looked at this form of positive bias from the perspective of students. Students were also found to overestimate their academic performance. Findings indicated that those who were scoring in

the lower 12% of the class estimated they were scoring in the higher 32% of the class. In 1993 Tennen & Affleck (as cited in Baumeister) found that such positive bias' mentioned act as social props, without these social props individuals are more prone to depression and mental illness. Similarly Coppersmith (1967) found evidence of a relationship (negative correlation) between self-esteem and depression. Previous studies have also found that low self-esteem during adolescent years was a predictor of criminal behaviour and limited economic prospects in adulthood (Trezensniewski, Dannellon, Moffitt, Robbins, Paulton & Caspi 2006). Furthermore concerning high self-esteem, prosocial behaviour and happiness has been found to have a strong relation to high self-esteem (Barber, Eccles & Stone, 2001. & Baumeister, Campbell, Kreuger & Vohs, 2003).

Research of self-esteem has certainly branched out to the area of internet related behaviours in recent years. Caplan (2003) asserts that some individuals prefer online interaction as opposed to face to face encounters as it is `seem like a less threatening situation. This suggests that those who possess lower self-esteem would be more confident in themselves in their online interactions. Fioravanti, Dettore & Casale's (2012) research coincides with that of Caplans. In their study it was found that preferred online interaction played a mediating role in the relationship between self-esteem and compulsive internet use. Wilcox and Stephen (2014) have made steps towards explaining this phenomenon . In their research it was suggested that social networking sites primarily boost individual's self-esteem.

Many researchers have been interested in observing the behaviour of individuals whilst on online, especially social networking sites. A study in (2014) was carried out by Vogel, Rose, Roberts & Eckles which examined the effect of ""chronic and temporary exposure to social media-based social comparison information on self-esteem"" (p.206). In their research Vogel and colleagues conducted two studies. In study one, participants who

had high Facebook activity often were found to have poorer trait self-esteem which was mediated by larger exposure to upward social comparison on social media. In study two, individuals were temporarily exposed to Facebook profiles. It was recorded that individuals showed lower levels of state self-esteem and self-evaluation when profile of the target person contained upward social comparison material e.g. high activity & healthy habits as opposed to profiles with downward comparison information i.e. low activity and unhealthy habits. A similar study by Vaulkenberg, Peter & Schouten (2006) examined Dutch friend networking sites such as MySpace or Friendster. In the study the researchers examined the repercussions of using such networking sites. The frequency that participant used the networking sites were found to have a large effect on the participants self-esteem. Feedback that users received on their online profiles was also found to have an effect on the individual's self-esteem. Positive feedback on individual's profiles gave rise to an increase in self-esteem however negative feedback often resulted in a decrease in self-esteem.

Research concerning self-esteem and problematic internet use has been extensive in the field of psychology. Many studies have gone beyond the standard measure of self-esteem and investigated many subtypes of self-esteem in relation to internet behaviour. Stieger & Burger (2010) found that individuals scoring high on Problematic internet use often possess low explicit self-esteem (conscious, deliberate) and high implicit self-esteem (unconscious, automatic). This emphasizes that individuals may appear as though they have high self-esteem but this may be internally contradicted by their explicit self-esteem. Research by Adym & San (2011) examined various measures of self-esteem in their study. The results of a Pearson's r coefficient found that family-home self-esteem, social self-esteem, general self-esteem and total self-esteem were all correlated with compulsive internet use. It was also found that family-home self-esteem and social self-esteem were significant predictors of problematic internet use. A similar study by Hernandez, Morales, Nishimori, & Orellana

(2012) examined personality aspects which included measures of self-esteem (social esteem, performance esteem and appearance esteem) as well as felt perceived oppression, attributed perceived oppression and life satisfaction. Results of a multiple regression indicated that social esteem was a significant predictor of problematic internet use in participants.

Research concerning problematic internet use and self-esteem in review has found to vary. Some studies found that high self-esteem is related to problematic internet use and on the contrary some studies state that low self-esteem is linked to problematic internet usage. The current study aims to contribute to these findings by investigating this relationship in an Irish setting. If the researcher is successful in identifying a predictive relationship between problematic internet use and self-esteem its contribution may someday lead to the development of intervention and coping strategies.

Satisfaction with Life and Problematic Internet Use.

Along with self-esteem and optimism, life satisfaction will also be measured in this study. This will be achieved by the use of the satisfaction with life scale developed by Diener and colleagues (1985). Shin & Johnson 1978 define life satisfaction as the “assessment of an individual’s quality of life based on one’s chosen standards. In other words this means that our life satisfaction is compared to the ideal standard which each person sets out for themselves. This may be because life satisfaction is viewed as one of life’s most desired achievements (Chang et al, 2003). Tatarkevics (1976) remarked that ““happiness requires total satisfaction that is satisfaction as a whole”” p.8. The internet (particularly social networking sites) has often been found to have a positive effect on individual’s satisfaction with life. This may be because of the increase in social capital, the internet may act as a lifeline to those who are socially isolated for different reasons e.g. one’s sexual orientation, culture or religion (Berger, 2011).

There have been many recent studies in the past few years concerning life satisfaction and problematic internet use. Steinfield, Ellison, & Lampe (2008) found that there is an interaction between social network usage and psychological well-being which may be beneficiary for those with low levels of self-esteem and life satisfaction. This research gains support from a study by Pénard, Poussing & Suire (2011) who found in their research that non internet users are less satisfied with life than those who do use the internet. The positive effects of internet use have been reported in many other research studies including Vaulkenburg and Peter (2009) who stress that online interactions help combat social isolation. Valenzuela & Kee (2009) also found a positive relationship between social network use and life satisfaction.

On the contrary to the findings discussed above life satisfaction has been often found to be negatively impacted by problematic internet use. An example of such studies was carried out by Bozoglan, Demerir & Sahin (2013). In their research a number of psychological factors were measured in relation to problematic internet use across many subscales. Results of statistical testing indicated that self-esteem and life satisfaction explained both health problems and interpersonal problems subscales of internet addiction. Additional contribution to research by Shahnaz & Karim (2014) found that internet addiction has a negative impact on life satisfaction. Specifically the researchers concluded that individuals who are users of social networking sites such as Twitter, Skype & Facebook score higher on internet addiction scales. A similar study carried out by Ko, Yen, Chen, Chen & Yen examined online behaviours of males and females across a number of different psychological measures. It was found that males in this particular study were found to have more gaming problems. Older age, low self-esteem and low life satisfaction were additionally found to be associated with severe internet addiction in males but not in females. However research by Aktepe, Olgac Dundar, Soyoz, & Sonmez (2013) seems disagree with many

research findings. Their research revealed that problematic internet users scored low on loneliness and high on levels life satisfaction.

However there seems to be some discrepancies in research findings, some researchers have found positive correlation between life satisfaction and problematic internet use (Valenzuela et al 2008), where others found a negative correlation (Cao et al, 2011 & Stepanikova, Nie, & He, 2010). However it is hoped that this study will be able to investigate this relationship between problematic internet use and life satisfaction to contribute to previous research, if a relationship is observed at all.

Rationale and Hypotheses

This study is being carried out as there seem to be a rise in problematic internet usage which is described above in the literature review. On further investigation into the topic of problematic internet use it was observed there were many inconsistencies in research findings in relation the psychological constructs of optimism, self-esteem and life satisfaction. In hope to contribute to research findings these variables will be examined to see if they will or will not predict problematic internet use in participants. This contribution to research hopefully will make it more clear what predicts problematic internet use. Future research in this area may help develop coping strategies and therapies for those who compulsively use the internet. Therefore the hypotheses of this research are as below:

1. It is hypothesized that optimism, self-esteem and life satisfaction will be significant predictors of problematic internet use.
2. It is predicted that there will be a difference between males and females in relation to problematic internet use.

Method

Participants:

For this study participants were recruited by means of convenience and snowball sampling. The original population was of an online sample. The questionnaire was advertised on an internet forum called boards.ie. Additionally the questionnaire was also shared by friends via social media. 98 participants completed the survey. There was an unequal gender balance amongst the participants with 64 females and 34 males. The participants were not given any incentive to take part in this study. Each questionnaire was solely completed on a voluntary basis.

Design:

A correlational design was used to investigate the relationship between problematic internet use, optimism, self-esteem and life satisfaction. Males and females were also compared on the latter. This research is quantitative in nature as it will make use of four questionnaires to measure the variables of PIU, optimism, self-esteem and life satisfaction. The method of quantitative research allows for numerical statistical testing and is less time consuming than qualitative methods. Problematic internet use was the criterion variable whereas optimism, self-esteem and life satisfactions acted as the predictor variables. All four the previously mentioned variables were scale and gender was a nominal variable.

Materials:

The online survey which was used in this research was developed on Google Forms software. The questionnaire comprised of 44 items. Four separate questionnaires were used to measure the variables these include The Problematic Internet Use Questionnaire (PIUQ), The Life Orientation Test – Revised (LOT-R), Rosenberg’s Self Esteem Scale (RSES) and the Satisfaction with Life Scale (SWLS). Additionally there was only one demographic item featured in the questionnaire which was gender. All of these questionnaires mentioned have been widely used in research and have established reliability and validity. Copies of all of the above psychological measures can be found in the appendices section at the end of this document.

To measure internet use the PIUQ developed by Demetrovics, Szeredi, & Rózsa, (2008) was used which is the newest developed questionnaire out of the four being used in this study(see Appendix 1). This questionnaire was designed to measure problematic internet behaviour based on previous research and tools to measure internet use(e.g. Internet addiction test ,Young, 1998) .Originally this instrument featured 30 items but in order to improve reliability it was reduced to 18 items. The 18 items are all featured as 5 point Likert scale which is easily followed. The method of scoring is as follows 1= Never 2= Rarely 3= Sometimes 4= Often and 5= Always. This measure makes use of questions such as “How often do people in your life complain about spending too much time online?” and “How often do you spend time online when you’d rather sleep?” Cronbach alpha was used to measure the internal consistency of the PIUQ. The PIUQ scored Cronbach $\alpha = .87$ additionally the test re-test of the PIUQ scored .90.

In order to measure optimism the LOT-R was utilised (Scheier, Carver, & Bridges, 1994). This survey is much shorter than the PIUQ possessing 10 items which are also scored

on a Likert scale. Items are scored as the following 0= Strongly Agree 1= Disagree 2= Neutral 3= Agree 4= Strongly Agree; however items 3, 7 and 9 are reversed scored. Additionally items 2, 5, 6 and 8 are filler questions so they were not used in the calculation of the sum scores. Examples of question featured in this instrument include “In uncertain times, I usually expect the best” and “I rarely count on good things happening to me” (see appendices 2). Psychometric testing on this measure shows acceptable internal consistency (Cronbach $\alpha = .76$).

The Rosenberg Self-esteem scale (Rosenberg, 1965) is one of the most used self-esteem scales in psychological research. Like the LOT-R scale this measure makes use of 10 items. The item content in this survey relate to how individuals feel about themselves e.g. “At times, I think I am no good at all.” and “I feel that I’m a person of worth, at least on an equal plane with Others”. Each question is rated on a 4 point Likert scale and requires reverse scoring on questions 2, 5, 6, 8 & 9 (see appendices 3). Test re-tests correlations show stability of this instrument with scores of .85 and .88. Internal consistency was also demonstrated Guttman scale coefficient of reproducibility of .92 (Rosenberg, 1979).

The most brief of all the measures used in this research was the SWLS (Diener, Emmons, Larsen, & Griffin, 1985). As opposed to the other measures used in this research the SWLS only consists of 5 items and requires no reverse scoring. The SWLS is scored by a 7 point Likert scale where individuals rate their life satisfaction (see appendices 4). Those who score 21-25 are said to be “slightly satisfied” with life, 26-30 are said to be “satisfied” and 31-35 are said to be “extremely satisfied” with life. Those scoring 19 and below range from being “slightly dissatisfied” to “extremely dissatisfied”. Analysis of the SWLS by Matt Vassar (2008) proved this instrument to be reliable with good internal consistency (Cronbach $\alpha = .76$)

Procedure

Before the study could commence the researcher had to obtain ethical approval. This was accomplished by the completion research proposal and ethical review form. On ethical approval it was then acceptable for the researcher to proceed with the research study. A method of convenience snowball sampling was used in order to obtain participants. The questionnaire was posted on an online forum called “boards.ie”. The questionnaire can be found in the appendix section (Appendix 5). The questionnaire had an introductory statement informing the participant what the study was about. Participants were notified that it was an anonymous survey and that once their data had been submitted it could not be withdrawn as it would be unidentifiable. Participants were asked to answer all questions as honest as possible. On completion of the survey contact information was provided for individuals who had questions about the research or for those who may have been affected by the content of the survey.

Data Analysis

Data from the online survey was entered into SPSS (version 22) in order to run descriptive and inferential statistical tests. Before the sum of each measure could be calculated certain items had to be recoded in SPSS, in order to apply reverse scoring. The sum of each of the psychological measures was then computed by use of the transform compute variable command. A descriptive statistics test was carried out to obtain general information of each variable. Tests to investigate the distribution of the data were carried out to see what statistical tests would be applicable according to the distribution of data. A multiple regression was then run to investigate whether optimism, self-esteem and life satisfaction were predictors of problematic internet use. The means of males and females were compared in an independent t-test on problematic internet use scores also.

Results

Descriptive Statistics

The Descriptive statistics command was carried out in order to examine the sample of 98 participants (M= 35 F= 65). Preliminary tests were carried out to verify there was no infraction of the assumption of normality. It was found that in all but one of the psychological measure signs of slight skewness however it was decided that despite the slight skew the data was relatively normal to continue with inferential statistical testing (Dancey & Reidy, 2011) (see appendix 6 for histogram distributions). The means and standard deviations of the variables Problematic Internet Use, Optimism, Self-esteem and Life Satisfaction are shown in Table 1 below.

Table 1 *Descriptive Statistics of Psychological Measures*

Variable	Mean	Standard Deviation
Problematic Internet Use	39.02	13.56
Optimism	11.59	2.73
Self-esteem	11.31	4.02
Life Satisfaction	19.95	6.77

Inferential Statistics: Multiple Regression.

Before multiple regression could be carried out the researcher had to check the assumptions. The Mahalanobis distance was below 16.27 which indicated that there were no outliers in the data set. Additionally as noted above the test variables were checked for normal distributions. Particular attention was shown toward the criterion variable problematic internet use. The multiple regression command was used to test whether optimism, self-esteem and life satisfaction were predictors of problematic internet use after meeting the assumptions. The results of the regression indicate that collectively the independent variables optimism, self-esteem and life satisfaction did not predict problematic internet use $F(3,94) = 1.98, P = .12$ (see table 2 below) . It was found that optimism ($\beta = -.03, p = .77, 95\% \text{ CI} = -1.23, .91$) and self-esteem ($\beta = .13, p = .25, 95\% \text{ CI} = -.31, 1.15$) were not significant predictors of problematic internet use, however life satisfaction approached significance ($\beta = -.20, p = .052, 95\% \text{ CI} = -.80, .00$) the results obtained therefore accept the null hypothesis.

Table 2 *Results of Multiple Regression.*

Variable	F	df	Beta (β)	Sig.	95% Confidence Intervals	
					Upper Bound	Lower Bound
Regression	1.98	3, 97		.12		
Optimism			-.03	.77	1.23	.91
Self-esteem			.13	.25	-.31	1.15
Life Satisfaction			-.20	.052	-.80	.00

Inferential Statistics: Independent Samples T-test

The results of Levene's test of equal variance $F_{80.36} = (4.59)$, $P=0.3$ indicated that the equal variances of the two populations is not assumed. The result of the independent t-test were not significant, $t(80.36) = -.93$, $p=.37$. This indicates that there was no significant difference between the scores of males ($M= 37.38$ $SD= 11.72$) and the scores of females ($M= 39.90$ $SD= 14.50$). Results of the independent samples t-test is displayed below in table 3. In light of the statistical finding the null hypothesis is accepted.

Table 3 *Results Measuring Difference between Male and Females on PIU.*

Variable	Groups	N	Mean	Standard Deviation	F	t	Sig.
PIU	Males	34	37.38	11.72	4.57	-.92	.35
	Females	64	39.89	14.45			

Discussion

The present study set out to investigate two hypotheses pertaining to problematic internet use. The first hypothesis was based on previous research that suggested that problematic internet use was often found to be related to the psychological constructs of optimism, self-esteem and life satisfaction. Therefore it was hypothesized that optimism, self-esteem and life satisfaction would be significant predictors of problematic internet use. However the results of statistical testing have found that these psychological measures did not predict problematic internet use within participants. Thus the null hypothesis could not be rejected. The predictor variables of optimism, self-esteem and life satisfaction will be discussed below individually.

On observation of the multiple regression coefficients optimism was to be the weakest predictor of problematic internet use. The mean scores of optimism were 11.60 out of a possible 40 which suggests that the sample population generally scored low on optimism levels. These low scores however did not seem to impact scores of problematic internet use. Already existing literature has been able to link unrealistic optimism with those who compulsively use the internet.

Previous research has found the internet use can predispose individuals to cyber bullying or internet harassment via social networking sites and gaming sites. It is speculated that such online events may decrease individual's optimism scores; it may also cause individuals to refrain from using the internet regularly. This may explain the no significant findings in this research study however further research is needed to validate this speculation.

Like optimism self-esteem was not found to be a significant predictor of problematic internet use. Previous research has found that high levels of self-esteem are often linked to high internet activity. Some studies suggest that individuals find online interactions more attractive than face to face interactions. Online social networking sites allow individuals to

present themselves how they wish to be seen by others. Increase in online activity may give personal incentives by providing a boost in the user's self-esteem. Contrary to these findings, other studies suggest that high internet activity predicts low self-esteem levels. It has been found that individuals often take part in upward social comparison. This is where individuals compare themselves to others in a negative light. Such social comparison has been found to have a negative effect on a person's self-esteem. These findings gain support from Mehdizadeh (2010) who found that high Facebook activity is correlated with high scores in narcissism and low self-esteem scores. However, the current research did not retain the finding of either side of these previous findings. Individuals in the current study had scored relatively low on self-esteem levels, however, these scores were not found to significantly predict problematic internet use. Negative feedback on social networking sites was found to decrease an individual's self-esteem. Like in the case of optimism, such events may make it less likely for individuals to use the internet, especially social networking sites. There are many variations in measures of self-esteem, for example, social, family-home, and general self-esteem; therefore, it is speculated that future research may find significant relationships by measuring more specific areas of self-esteem compared to a broad measure of general self-esteem.

As mentioned above, the predictor variables of optimism and self-esteem were not significant predictors of problematic internet use. However, the third predictor, life satisfaction, showed trends more characteristic to previous research findings. It was observed that, similar to optimism and self-esteem scores, life satisfaction scores were quite low. The mean score for satisfaction with life was 19.94, which indicated that the sample population was, on average, "slightly dissatisfied" with life. Although the overall multiple linear regression was not significant, satisfaction with life was found to have approached significance and was the strongest predictor variable in the regression. For this reason, it is postulated that in a future study,

perhaps with a larger sample life satisfaction may be found to be a significant predictor of problematic internet use.

To test the second hypothesis an independent t-test was used to measure whether there was a difference in problematic internet use scores amongst males and females. Contrary to previous research findings it was found that there was no significant difference observed. Thus the alternative hypothesis was rejected. Previous literature has regularly found that males exhibit more problematic internet use than females. These findings have been observed in many contexts. For example some studies have found relationships between problematic internet use and dating anxiety, depression and social anxiety (Odaci & Kalkan, 2010., Yen, Ko, Yen, Wu & Yang, 2007 & Lam, Peng, Mai, & Jing, 2009). In all these studies problematic internet use in relationship to each of the variables was found to more prevalent males. It is speculated that the current research did not retain previous research finding due to gender imbalance in the sample population. It was observed that there was nearly twice the amount of females participating in the study compared to male participants. This would suggest that general population of males were not accurately represented by the current research sample. In light of the statistical findings it is suggested that a difference between the males and female may be observed if a larger and balanced gender population was analysed.

Limitations and Strengths

In review of the present research it was evident that there were a number of limitations. First of all the sample mentioned earlier in the method section was obtained by snowball convenience sampling. Originally the questionnaire was posted on an online forum "Boards.ie". However fellow students and friends of the researcher shared the questionnaire with their friends, family and co-workers on social networking sites such as Facebook.

Although this method of sampling allowed for a high response rate in a short period of time, snowball convenience sampling may not have provided a sample which was most representative of the general population.

An additional limitation to this study is again related to the sample. As noted many of the participants were friends and colleagues of the researcher which may have affected the answers provided in the questionnaires. Social desirability bias occurs when individuals when taking part in a study gives socially desirable responses instead of what they are truly feeling (Neeley & Cronley, 2004). Although anonymity was assured some participants may have refrained from giving honest answers so that any deviance from social norms would not be detected. Research by Fisher and Tellis (1998) suggested that indirect questioning could be used as method to avoid such social desirability bias. However it is also noted in the same paper that such indirect questioning may avoid unbiased answers from the participant, but indirect questioning may raise problems concerning validity.

As there were limitations to the current study it also showed some strength. The researcher obtained the research data by online questionnaires. Questionnaires have been found to be less time consuming than some qualitative forms of research. This form of obtaining data also ensures anonymity which in turn results in lesser chance of bias on the behalf of the researcher (Berry, 1994). Also it must be noted that this method of quantitative research allows for precise numerical data that can be analysed in relatively short periods of time.

Conclusion

The findings of the current research were unable to retain the findings of already existing literature. The results of a multiple regression indicated that optimism, self-esteem and life satisfaction were not significant predictors of problematic internet use. Thus on analysis of the data, it could be concluded that the hypothesis could be accepted. The second hypothesis was also rejected. The researcher next ran an independent samples t-test to examine the difference in males and females in problematic internet use scores. However there was no significant difference observed. This observation contradicted a lot of previous literature which suggested that problematic internet use was generally more prevalent in young males. It can be concluded that in this instance of research there was no significant findings revealed. However there is a large body of research available that disagrees with the current research. Perhaps future research in this area will conduct a similar study but avoid the pitfalls of this study.

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Appendices

Appendix 1 Copy of the Problematic Internet Use Questionnaire Demetrovics, Szeredi, and Rózsa (2008)

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APPENDIX Problematic Internet Use Questionnaire (PIUQ)

In the following you will read statements about your Internet use. Please indicate on a scale from 1 to 5 how much these statements characterize you.

	never	rarely	sometimes	often	always
1. How often do you fantasize about the Internet, or think about what it would be like to be online when you are not on the Internet?	1	2	3	4	5
2. How often do you neglect household chores to spend more time online?	1	2	3	4	5
3. How often do you feel that you should decrease the amount of time spent online?	1	2	3	4	5
4. How often do you daydream about the Internet?	1	2	3	4	5
5. How often do you spend time online when you'd rather sleep?	1	2	3	4	5
6. How often does it happen to you that you wish to decrease the amount of time spent online but you do not succeed?	1	2	3	4	5
7. How often do you feel tense, irritated, or stressed if you cannot use the Internet for as long as you want to?	1	2	3	4	5
8. How often do you choose the Internet rather than being with your partner?	1	2	3	4	5
9. How often do you try to conceal the amount of time spent online?	1	2	3	4	5
10. How often do you feel tense, irritated, or stressed if you cannot use the Internet for several days?	1	2	3	4	5
11. How often does the use of Internet impair your work or your efficacy?	1	2	3	4	5
12. How often do you feel that your Internet usage causes problems for you?	1	2	3	4	5
13. How often does it happen to you that you feel depressed, moody, or nervous when you are not on the Internet and these feelings stop once you are back online?	1	2	3	4	5
14. How often do people in your life complain about spending too much time online?	1	2	3	4	5
15. How often do you realize saying when you are online, "just a couple of more minutes and I will stop"?	1	2	3	4	5
16. How often do you dream about the Internet?	1	2	3	4	5
17. How often do you choose the Internet rather than going out with somebody to have some fun?	1	2	3	4	5
18. How often do you think that you should ask for help in relation to your Internet use?	1	2	3	4	5

Subscales

Obsession: Questions 1, 4, 7, 10, 13, 16

Neglect: Questions 2, 5, 8, 11, 14, 17

Control disorder: Questions 3, 6, 9, 12, 15, 18

(Manuscript received October 27, 2007;
accepted for publication December 7, 2007.)

Appendix 2

LIFE ORIENTATION TEST –Revised (LOT-R)

LIFE ORIENTATION TEST –Revised (LOT-R)

Reference:

Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063-1078.

Description of Measure:

A 10-item measure of optimism versus pessimism. Of the 10 items, 3 items measure optimism, 3 items measure pessimism, and 4 items serve as fillers. Respondents rate each item on a 4-point scale: 0 = *strongly disagree*, 1 = *disagree*, 2 = *neutral*, 3 = *agree*, and 4 = *strongly agree*.

LOT-R is a revised version of the original LOT (Scheier & Carver, 1992; see abstract below). The original LOT had 12 items: 4 worded positively, 4 worded negatively, and 4 fillers.

Abstracts of Selected Related Articles:

Scheier, M. F., & Carver, C. S. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. *Cognitive Therapy and Research*, 16, 201-228.

The primary purpose of this paper is to review recent research examining the beneficial effects of optimism on psychological and physical well-being. The review focuses on research that is longitudinal or prospective in design. Potential mechanisms are also identified whereby the beneficial effects of optimism are produced, focusing in particular on how optimism may lead a person to cope more adaptively with stress. The paper closes with a brief consideration of the similarities and differences between our own theoretical approach and several related approaches that have been taken by others.

Vautier, S., Raufaste, E., & Cariou, M. (2003). Dimensionality of the Revised Life Orientation Test and the status of the filler items. *International Journal of Psychology*, 38, 390-400.

Dispositional optimism was originally construed as unidimensional (Scheier & Carver, 1992). However, LOT-R data (Scheier, Carver, & Bridges, 1994) generally appeared bidimensional as a number of studies suggest a twocorrelated-factor model representing optimism and pessimism. Attempts at corroborating one-factor models suggest that correlated errors between positively worded items are required for an adequate account of the data. This article explains bidimensionality by the influence of social desirability (i.e., being positive is desirable). Namely, in the present study, correlated errors are interpreted as the presence of individual differences related to the tendency to present oneself in a positive manner. Moreover, response styles can be corroborated by appropriately modelling the entire covariance matrix (i.e., including fillers), by checking that fillers with positive meaning correlate with the faking-good group factor. Students ($N = 442$) responded to a French adaptation of the LOT-R. The data were submitted to SEM analyses. The traditional twocorrelated factor model (optimism–pessimism) was outperformed by a model including a common factor (“optimism”) plus a factor grouping positive items only (“faking positive”). In addition, reliability analyses showed that the choice of the model clearly impacts the reliability estimates based on the model. The entire dataset was modelled for exploring the relationships between the fillers and the measurement model (i.e., the set of all relationships between factors and their indicators). The specific correlations of fillers whose meaning is positive with the faking-good group factor corroborated its substantial interpretation. It is

concluded that there is no empirical necessity for hypothesizing that the dispositional optimism construct must be split into optimism plus pessimism.

Wimberly, S. R., Carver, C. S., & Antoni, M. H. (2008). Effects of optimism, interpersonal relationships, and distress on psychosexual well-being. *Psychology and Health, 23*, 67-72.

This study examined associations between optimism, social support, and distress as they relate to psychosexual well-being among 136 women with Stage 0, I, and II breast cancer. Women were assessed immediately post-surgery and 3, 6, and 12 months post-surgery. Results support two cross-sectional mediation models. The first model indicates that patients who are more optimistic experience greater psychosexual well-being (i.e., feel more feminine, attractive, and sexually desirable) partly because they perceive themselves as having more social support available. The second model indicates that patients who are more optimistic experience greater psychosexual well-being partly because they experience less emotional distress related to the disease. When the two models were tested simultaneously, distress no longer contributed uniquely to the model at any time point except for 12 months follow-up.

Scale:

Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no "correct" or "incorrect" answers. Answer according to your own feelings, rather than how you think "most people" would answer.

- A = I agree a lot
- B = I agree a little
- C = I neither agree nor disagree
- D = I disagree a little
- E = I disagree a lot

1. In uncertain times, I usually expect the best.
2. It's easy for me to relax.
3. If something can go wrong for me, it will. (R)
4. I'm always optimistic about my future.
5. I enjoy my friends a lot.
6. It's important for me to keep busy.
7. I hardly ever expect things to go my way. (R)
8. I don't get upset too easily.
9. I rarely count on good things happening to me. (R)
10. Overall, I expect more good things to happen to me than bad.

Scoring:

Items 3, 7, and 9 are reverse scored (or scored separately as a pessimism measure). Items 2, 5, 6, and 8 are fillers and should not be scored. Scoring is kept continuous – there is no benchmark for being an optimist/pessimist.

Appendix 3

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

The scale is a ten item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 High School Juniors and Seniors from 10 randomly selected schools in New York State.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

1.	On the whole, I am satisfied with myself.	SA	A	D	SD
2.*	At times, I think I am no good at all.	SA	A	D	SD
3.	I feel that I have a number of good qualities.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.*	I feel I do not have much to be proud of.	SA	A	D	SD
6.*	I certainly feel useless at times.	SA	A	D	SD
7.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8.*	I wish I could have more respect for myself.	SA	A	D	SD
9.*	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10.	I take a positive attitude toward myself.	SA	A	D	SD

Scoring: SA=3, A=2, D=1, SD=0. Items with an asterisk are reverse scored, that is, SA=0, A=1, D=2, SD=3. Sum the scores for the 10 items. The higher the score, the higher the self esteem.

The scale may be used without explicit permission. The author's family, however, would like to be kept informed of its use:

The Morris Rosenberg Foundation
c/o Department of Sociology
University of Maryland
2112 Art/Soc Building
College Park, MD 20742-1315

References

References with further characteristics of the scale:

- Crandal, R. (1973). The measurement of self-esteem and related constructs, Pp. 80-82 in J.P. Robinson & P.R. Shaver (Eds), **Measures of social psychological attitudes. Revised edition.** Ann Arbor: ISR.
- Rosenberg, M. (1965). **Society and the adolescent self-image.** Princeton, NJ: Princeton University Press.
- Wylie, R. C. (1974). **The self-concept. Revised edition.** Lincoln, Nebraska: University of Nebraska Press.

Appendix 4

Satisfaction with Scale (Diener, Emmons, Larsen, & Griffin, 1985).

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

____ In most ways my life is close to my ideal.

____ The conditions of my life are excellent.

____ I am satisfied with my life.

____ So far I have gotten the important things I want in life.

____ If I could live my life over, I would change almost nothing.

- 31 - 35 Extremely satisfied
- 26 - 30 Satisfied
- 21 - 25 Slightly satisfied
- 20 Neutral
- 15 - 19 Slightly dissatisfied
- 10 - 14 Dissatisfied
- 5 - 9 Extremely dissatisfied

Appendix 5.

Copy of Questionnaires used in the current study



Optimism, self esteem, and life satisfaction as predictors of problematic internet use.

My name is Tammy Kilmartin and I am a third year psychology student in Dublin Business School. It is required that I complete a research project for my final year thesis.

This research is interested in the predicting factors (optimism, self esteem & life satisfaction) of problematic internet use and has gained ethical approval.

The questionnaire is anonymous and all data will only be used for scientific purposes. You MUST be 18 to complete to take part. If you could please fill out the following survey it would be most appreciated. It should only take approximately 10 minutes to complete. Once you have the questionnaire submitted your data cannot be deleted as it will not be identifiable. If at anytime you feel like you do not want to continue with the questionnaire you can do so.

If you have any queries about the research please feel free to contact me any time at

Many Thanks,
Tammy.

Are you male or female?

- Male
 Female

Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no "correct" or "incorrect" answers. Answer according to your own feelings, rather than how you think "most people" would answer.

0 = I agree a lot

1 = I agree a little

2 = I neither agree nor disagree

3 = I disagree a little

4 = I disagree a lot

It's easy for me to relax

0 1 2 3 4

I agree a lot. ● ● ● ● ● I disagree alot.

If something can go wrong for me, it will.

0 1 2 3 4

I agree a lot. ● ● ● ● ● I didagree lots.

In uncertain times, I usually expect the best

0 1 2 3 4

I agree a lot. ● ● ● ● ● I disagree a lot.

I'm always optimistic about my future.

0 1 2 3 4

I agree a lot. ● ● ● ● ● I disagree a lot.

I enjoy my friends a lot.

0 1 2 3 4

I agree a lot. ● ● ● ● ● I disagree a lot.

It's important for me to keep busy.

0 1 2 3 4

I agree a lot. ● ● ● ● ● I disagree a lot.

I hardly ever expect things to go my way.

0 1 2 3 4

I agree a lot. I disagree a lot.

I don't get upset too easily.

0 1 2 3 4

I agree a lot. I disagree a lot.

I rarely count on good things happening to me.

0 1 2 3 4

I agree a lot. I disagree a lot.

Overall, I expect more good things to happen to me than bad.

0 1 2 3 4

I agree a lot. I disagree a lot.

Below is a list of statements dealing with your general feelings about yourself.

1= Strongly agree.

2= Agree.

3= Disagree.

4= Strongly disagree.

At times, I think I am no good at all.

0 1 2 3

Strongly Disagree Strongly agree,

On the whole, I am satisfied with myself.

0 1 2 3

Strongly disagree. Strongly agree.

I feel that I have a number of good qualities.

0 1 2 3

Strongly Disagree. Strongly agree.

I am able to do things as well as most other people.

0 1 2 3

Strongly Disagree Strongly agree

I feel I do not have much to be proud of.

0 1 2 3

Strongly Disagree. Strongly agree.

I certainly feel useless at times.

0 1 2 3

Strongly Disagree. Strongly agree.

I feel that I'm a person of worth, at least on an equal plane with others.

0 1 2 3

Strongly Disagree. Strongly agree.

I wish I could have more respect for myself.

0 1 2 3

Strongly Disagree. Strongly agree.

All in all, I am inclined to feel that I am a failure.

0 1 2 3

Strongly Disagree. Strongly agree.

I take a positive attitude toward myself.

0 1 2 3

Strongly Disagree. Strongly agree.

In the following you will read statements about your Internet use. Please indicate on a scale from 1 to 5 how much these statements characterize you.

- 1= Never.
2= Rarely.
3= Sometimes.
4= Often.
5= Always.

How often do you fantasize about the Internet, or think about what it would be like to be online when you are not on the Internet?

1 2 3 4 5

Never. Always.

How often do you neglect household chores to spend more time online?

1 2 3 4 5

Never. Always.

How often do you feel that you should decrease the amount of time spent online?

1 2 3 4 5

Never. Always.

How often do you daydream about the Internet?

1 2 3 4 5

Never. Always.

How often do you spend time online when you'd rather sleep?

1 2 3 4 5

Never. Always.

How often does it happen to you that you wish to decrease the amount of time spent online but you do not succeed?

1 2 3 4 5

Never. Always.

How often do people in your life complain about spending too much time online?

1 2 3 4 5

Never. Always.

How often do you realize saying when you are online, "just a couple of more minutes and I will stop"?

1 2 3 4 5

Never. Always.

How often do you dream about the Internet?

1 2 3 4 5

Never. Always.

How often do you choose the Internet rather than going out with somebody to have some fun?

1 2 3 4 5

Never. Always.

How often do you think that you should ask for help in relation to your Internet use?

1 2 3 4 5

Never. Always.

How often do you feel that your Internet usage causes problems for you?

1 2 3 4 5

Never. Always.

How often does it happen to you that you feel depressed, moody, or nervous when you are not on the Internet and these feelings stop once you are back online?

1 2 3 4 5

Never. Always.

Never. ● ● ● ● ● Always.

Thank You!

If you have any questions about this research please feel free to contact me at

If you have been anyway affected by the content of this survey again feel free to contact me.

Samaritans Ireland

Phone: 116 123

Email: jo@samaritans.org

Submit

100%: You made it.

Appendix 6

