

The relationship between Facebook use, gender, emotional attachment, connection strategies, online vs. real world relationships, self-esteem & loneliness.

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## **ABSTRACT**

The aim of this study is to determine if gender, emotional attachment, connection strategies, self-esteem and loneliness are significant in regards to Facebook Use. The aim is also to determine if there is a difference between online Facebook relationships and face-to-face relationships. There were 98 participants in this study aged 18 onwards. Participants undertook measures of Facebook intensity, self-esteem and loneliness. Results showed in regards to connection strategies, browsing was most likely, as opposed to meeting face-to-face or contacting or adding them online. Results showed no significant gender difference in Facebook use. Both high time per day on Facebook and large Facebook intensity levels moderately lowered loneliness levels. Self-esteem slightly increased with more time on Facebook per day. No significance was found between Facebook intensity and self-esteem. Higher rates of self-esteem correlated with lower loneliness levels. Results also inclined that as you get older your Facebook intensity lessens.

## Introduction

Facebook now boasts One billion users as of October, 2012, according to its own figures (Facebook Press, 2013). 618 million daily users are active on Facebook (Facebook Press, 2013). Studies indicate that 77% of Irish internet users have Facebook. Facebook initially began as a college student website, therefore is directing its appeal toward youth. 90% of Irish users are aged 15-24 years of age, with nine out of ten Irish 15-24 year olds using Facebook (Comscore & MRBI, 2011). 680 million people actively access Facebook through their mobile phones (Facebook Press, 2013). A 2009 study found people spend, on average, 38.93 minutes per day on Facebook (Christofides et al, 2009). How exactly people spend their time and communicate whilst on Facebook remains a cause for speculation. The effects of this change in the social environment remains to be seen.

Facebook can now be considered a pretty standard means of contemporary communication, with having gathered a staggering one billion members and more than 70 languages available on the site. Its founder, Mark Zuckerberg outlines how Facebook has gone beyond merely a communication tool and has adapted into a means to portray a social image “Think about what people are doing on Facebook today. They're keeping up with their friends and family, but they're also building an image and identity for themselves, which in a sense is their brand. They're connecting with the audience that they want to connect to. It's almost a disadvantage if you're not on it now” (Zuckerberg. 2009). On Facebook, it seems an individual can be whoever they desire, upload photos of themselves at their best and write as if there isn't a care in the world. Zuckerberg also touches on the social pride and status associated with being a

member of the Facebook club. Facebook users can post any pictures or information at their own free will on their profile. (Ellison et al, 2007).

Facebook belongs under the genre of a “social network” website, a place where an individual can publically communicate with their social network or contacts. A social network can be defined as “The structured set of social links an individual or group has with other persons or groups” (Reber et al, 2009, p750-1). It is a means for people to transform their life into a virtual world through the amenities Facebook makes available to its family, uploading photos, videos, personal thoughts and feelings and to communicate via private mail or instant chat. Children now are likely to take the internet for granted, like the telephone and television were in the past (Turow & Kavanaugh, 2003). With users in anticipation of being watched, people often portray themselves in their best light, developing a favourable online persona (Dwyer et al, 2007). A study of college students found that they used Facebook to express their identity (Pempek et al, 2009). Social identity can be described as “one’s identity in the public, social domain... not always on concert with one’s private, personal identity” (Reber, et al, 2009, p749). It’s the self “by which we are known to others” (Altheide, 2000, p. 2). Internet users may construct a “digital self” and use this to portray themselves in a positive light and that such an exposed online world can affect ones self-concept of their personal identity (Zaho et al, 2008, p1830-1832).

### **Connection Strategies on Facebook**

The sensation of utilising the internet, specifically Facebook, as a communicative and relationship management tool is a dynamic and complex issue. In such a dynamic online environment, with so many different personalities, agendas and online personas all in the same place, Facebook is a unique social environment. How

Facebook users spend their time on the site and how they connect and interact on it is cause for research, due to the huge social implications of a site like Facebook and the new form of communication it brings.

A 2007 web-study of 1,715 college students found that there are Four main reasons people use Facebook; socializing, entertainment, self-status seeking, and information (Park, Kee & Valenzuela, 2009). This study suggests that Facebook is a way of socializing that students find enjoyable. It also found that students may feel peer pressure to join Facebook. The main motives for using Facebook seem to be communication, however, Facebook use has many functions, not merely a social interaction. It would seem Facebook has a complex social dynamic, with posts, photos, group pages, “likes”, social groups and a billion different personalities all on the same site.

The social aspect of Facebook is the most obvious one, with its instant communication methods and information sharing. A 2009 survey of 92 undergraduate college students found almost a quarter of respondents merely use Facebook when they are bored. This study also suggests Facebook use is perfunctory and part of a daily routine. Students in this study spent more time observing rather than posting on their Facebook wall or engaging in conversations. This suggests Facebook is a passive social activity (Pempek et al, 2009). Facebook as entertainment to alleviate boredom is a new social era in which the Facebook user passively collects peer information as a form of recreational activity.

The top use for Facebook may be social surveillance and utilising the site to learn things about old friends and to maintain and/or reconnect with friends (Joinson, 2008). The proposed two main types of Facebook activities are “social browsing” or “social searching” (Wise et al, 2009, p555), which include this browsing through

photos, statuses and posts by Facebook friends, acquiring social information. Facebook use may be primarily a tool to facilitate gossip (Bumgarner, 2007). Younger Facebook users are more likely to be skilled in Facebook use, and older users are likely to be more confused by some of Facebook's features, such as privacy settings (Brandtzaeg et al, 2010).

An important factor in regards to individual use of the Facebook is the context in which it is used. Valenzuela, Park, and Kee (2009) in an online study of 1,715 college students suggest that peer acceptance may have a role to play in why people are enticed to use Facebook. This may suggest that peer Facebook usage has a role to play with social desirability. Participants in a 2008 Facebook study reported of an average of 259 Facebook friends (Zhao et al.). It would appear it has become a popular social norm to communicate via Facebook, and to keep up relations with friends via this Facebook medium. Studies indicate that peer acceptance (Harter, 1999) and interpersonal relationships are an important factor in life satisfaction (Froh et al, 2007, Eid & Larson, 2008). Facebook is an excellent medium in which an individual can strive for peer acceptance and maintain relationships. Facebook users may largely use the site in order to maintain relationships (Ellison et al, 2007, DiMicco & Millen, 2007, Ross et al, 2009, Gangadharbatla, 2008).

Some of Facebook's popularity may lay with its ease of communication and access to information. With a few clicks of a button one can be updated via their individual, personal "newsfeed" and can communicate via an almost effortless instant message. Facebook users have even set up a fan page, comparing using Facebook to checking it "like it's the morning paper" (Facebook site, 2013), suggesting it's become a perfunctory, everyday routine and a way to be socially updated daily. This type of



daily activity on Facebook may lead to developing an emotional attachment to the content of the site and the social curiosity that it meets.

### **Facebook as more than a communication tool – Emotional Attachment**

Facebook's growth has resulted in growing usage of the site as a tool for establishing and maintaining online relationships. This dependency on Facebook as a communicative and information providing tool may result in emotional attachment to this social networking site. Facebook proclaims on the site that it's "mission is to make the world more open and connected" (Zuckerberg, 2012).

There may be a case of too much of a good thing, resulting in emotional attachment to the site. Attachment can be defined as an "emotional tie between people" (Reber et al, 2009, p69), however there is no universally agreed definition of attachment (Condon, 2011). Facebook, as previously described, makes personal information about its users available to browse through. This changes the traditional information sharing and relationship establishment environment. In making personal details available, it is no longer necessary to conduct a conversation to find out new information about a friend. This contemporary method of establishing and maintaining peer relations may have a social impact and change the traditional emotional tie between people. This may transfer the emotional tie from "between people" to between one person and their computer, which is their source of intimate information. This contemporary communication and information sharing system is likely to have a social impact.

Debatin and Lovejoy (2009) proposed that Facebook use had become habitual and were struck by how it emerged that "how deeply Facebook is integrated into daily routines and rituals". If one were to type "F" into Google, a popular online search

engine, Facebook is the first to come up in the search results (retrieved from [www.google.com](http://www.google.com), 1/01/13, 5.17pm). This serves as an example as how Facebook has integrated its way into society. Significant numbers check their profiles or engage in internet activity daily (Joinison, 2008, Lenhart et al, 2010), suggesting there may be emotional attachment or dependency involved in using the site. Facebook has grown in members at a rapid pace, from 1 million members in 2005, to 50 million members in 2007 (Smith, 2008) and a feat of surpassing a billion members in 2012 (Lee, 2012), making it nothing short of an internet phenomenon.

Various research look beyond Facebook's communicative purposes and question if this change in the dynamic of how we communicate is necessarily always a good thing (Cain,2012; Walther et al, 2009; Ellison et al, 2011). There may be damage to the ego when an individual doesn't receive as much Facebook attention as their peer group, or as many Facebook friends, which is open information on the site. Patricia Rodgers (2007) states "Comparing yourself with others, a big preoccupation on sites such as Facebook, can be damaging psychologically". An article by The Times (2007) outlines how vulnerable one becomes when placing personal information on a social networking site such as Facebook for the world to see. If an individual so choose, they would be able to follow an active Facebook user's daily life through a series of "statuses", designed to portray the thoughts/feelings of the user and an archive of photos one may be "tagged" or identified in. This theoretically, may lead to emotional attachment to the Facebook site, as it is an instant way of privately following and comparing oneself against peers. Spears et al (2002) found that group effects are the same even when they are over the internet. A 2011 college student study found the more time spent on Facebook, the more emotionally attached to it an individual is likely to become (Kalpidou et al.).

There is evidence to suggest Females are more likely to get emotionally attached than males. Lithari et al. (2010) propose that females respond significantly stronger to emotional stimuli than males. Barrett et al. (1998) suggests that Females are the more emotional sex and have stronger emotional experiences. There is also evidence to suggest that females compare themselves to others (Berg et al, 2007; Spear & Armstrong, 1978; Richins, 1991) making them more likely to get emotionally attached to a social networking site like Facebook, where comparisons are available at ease. A site in which the age to partake is as young as 13 raises concerns as to the information one is free to post without realisation of its consequences. Having peer information available at a few clicks of a mouse may not necessarily be a healthy method in communication. At the age of 13 and up people are developing their sense of identity and it may be skewed by the constant comparisons and display of an individual's social life one can access at ease on the Facebook site. This may have implications of dependency and attachment to the site for an evaluation of oneself against peers. These attachments and peer evaluations may not be universal on Facebook, there may be differences in how males and females view Facebook and how likely they are to develop these emotional attachments, as previously discussed.

### **Facebook use and Gender- is there a significant difference in how the sexes use Facebook?**

Deaux (1984) found that the impact of gender as a social category is considerable, these differences may impact the way in which the sexes use Facebook. Benenson (1990) proposes that males are more concerned with peer acceptance, desirable attributes and position or status in a social network, whilst females are concerned with attributes that are necessary to friendships. In regards to gender

differences in internet use, there is some existing prejudice that the internet is more male dominated (Jonsson, 2007) and males have more confidence using computers than females (Yau & Cheng, 2012). One study proposed women see computers more as a “tool” for studying, researching etc. than a “toy” for recreational purposes compared to males (Li & Kirkup, 2007). However, a 2009 study found there are no significant gender differences in regards to Facebook use (Cain, Scott & Akers). Studies suggest that Females are more likely to use Facebook (Acquisti & Gross, 2006; Joinison, 2008). One study found females posted a significantly higher number of photos on Facebook than males (Pempek, Yermolayeva & Calvert, 2008). This difference in Facebook use between the sexes, as suggested in previously mentioned research, may correlate with self-esteem and loneliness levels. Limited research was available in regards to gender differences in Facebook usage.

### **Self-esteem and Facebook.**

Facebook is a site in which images and posts are immediately available to make comparisons to one-self. Spending many hours on Facebook, theoretically, may skew one's self-image and one may get an emotional attachment to scrolling through one's photos and status in an almost invasive fashion. Self-esteem may be defined as being “the subjective evaluation a person makes and maintains about himself or herself and the extent of belief in their capability, worth, and significance, which is conveyed through their attitudes and verbal behaviour” (Wilson et al, 2010 p 1). Self-esteem may be the extent one values, prizes or likes oneself (Andrews, 1991).

Not using Facebook has been positively associated with self-esteem (Loechner 2013). Suval (2012) suggests that others' status' about positive aspects of their life's may drag down personal self-esteem and lead to a negative cycle of comparison. In

contrast, Sweden's largest Facebook study of 1,011 males and females revealed that as Facebook interaction increased, self-esteem increased. However, they also found women who frequently used Facebook tended to be less happy with their lives. Men spent on average 64 minutes and women 81 minutes. This study found that low income and low education groups spent more time on Facebook and were the least content with their lives. 67% of Facebook users use the site simply to kill time (Denti et al, 2012).

A study at Cornell of 63 students has shown a link between viewing one's own Facebook profile for three minutes and high self-esteem via Rosenberg's self-esteem scale (Rosenberg, 1965). This study suggests selective self-presentation on one's Facebook profile, displaying oneself positively enhances self-esteem and makes one's self-esteem rise when they view this profile of themselves portrayed in a positive light versus those with no Facebook access. Those who edited their profiles to portray themselves best had the highest self-esteem (Gonzales & Hancock, 2011). This study still does not account for self-esteem levels when viewing others profiles and the impact of seeing their friends profiles displaying positive information about them. There is no information about the long-term effects of Facebook usage upon self-esteem levels and if it has a positive or negative impact, mainly because Facebook is a relatively new site.

A study of 584 German students found that users have a one in three chance of being envious of Facebook friends, and suggest this can lead eventually to low self-esteem and depression. This study found users perceive Facebook as a stressful environment and its use can decrease life satisfaction. Reading statuses about a holiday or new car can evoke this jealousy, loneliness and dissatisfaction (Krasnova et al, in press), therefore impacting self-esteem. Muise et al (2009) also found that Facebook use can evoke feelings of jealousy. It would seem lack of self-esteem and

loneliness have a link in regards to Facebook use. Social networking sites have also been linked with increased social tension (Boyd 2006). This may be due to the evidence that displays social networking sites users display themselves in a favourable light and may over-emphasise their achievements (Mehdizadeh, 2010). This evidence displays how one's self-esteem may be affected by comparing themselves idealised versions of their friends via their Facebook profiles, through their posts, statuses or photos. However, those with low self-esteem may utilise Facebook in order to boost their self-esteem and create a more favourable online world (Gosling et al, 2011).

Elisson et al (2008) who employed use of the Facebook intensity scale and Rosenberg self-esteem scale found that those with low self-esteem may use Facebook more as socialising online may be easier for them than face-to-face. Self-esteem in regards to social networking sites may be feedback dependent. Positive feedback can increase self-esteem and negative feedback can decrease self-esteem (Valkenberg, Peter & Schouten, 2006). If one already have low self-esteem, Facebook use may be detrimental to an individual's esteem and happiness (Moscaritolo, 2012).

People who spent more time on Facebook are more likely to have low self-esteem (Kalpidou et al, 2011). Mehdizadeh (2010) found those scoring lower on the Rosenberg self-esteem scale (Rosenberg, 1965) correlated with those who spent more time on Facebook per session and logged in more times throughout the day. Low self-esteem and loneliness may be associated (Peplau & Perlman, 1982). Employing the UCLA loneliness scale (Russell, 1996) loneliness and self-esteem were found to have a negative correlation (Stephan, Faeth, & Lamm 1988).

### **Facebook, face-to-face communication and Loneliness- does Facebook alleviate or exacerbate loneliness?**

Kraut et al (1998) found that internet usage positively correlated with loneliness and has negative social impact in a study examining the social and psychological impact of internet use in 73 households. In this study computers were given to households whom previously had no computer in the house and after a 2 year period, when retested, there was greater loneliness and depression levels measured. He also found that people spent more time online than with their friends and family face-to-face. This suggests that placing a computer in a household that previously was computer-free has a negative impact upon loneliness levels and that it also takes away from face-to-face interaction. Kiesler et al (2002) found however, that a follow up report found the effects of the Kraut et al (1998) study died out as their families had joined them online, therefore it was becoming a social norm to communicate via the internet and the loneliness levels decreased.

Perlman and Peplau (1981) defined loneliness as "the unpleasant experience that occurs when a person's network of social relations is deficient in some important way, either quantitatively or qualitatively" (p.31). Loneliness has been proposed to have detrimental health effects such as sleep disturbances (Cacioppo et al, 2002), lesser immune functioning (Kiecolt-Glaser et al, 1984) and to activate cortisol levels, increasing stress levels amongst youth (Doane & Adam, 2009). Studies have shown stress may have detrimental health effects (Zakowski, Hall & Baum, 1999; Van Pragg, 2004), which gives cause to investigate if this isolated activity of spending time on Facebook may have a psychological consequence. Spending many hours online vs. out in the real world may qualify as a deficit in social relations and is necessary to investigate its social impact.

Nie (2001) debates that internet usage detracts from “real world” friendships and from face-to-face contact with others, and also proposes that those who spend time online do not become more sociable, as they are likely to be social offline also, they retain the same level of sociability, regardless of internet use. Nie & Erbring (2000) conducted a study involving 4000 participants from 2689 households in an internet only study found, in parallel with other research found internet use reduces face-to-face communication, and suggested that it creates a “lonely crowd”. They also suggest that the internet has created a model of social change and that whilst internet users are growing, there is also a growing amount of things you can do online now (such as paying bills). Nie & Erbring (2000) also found there was a 15% decrease in social activities and a loss of contact with internet users personal social environment due to increased internet use. Markoff (2002) also found that using the internet is an isolating communication medium.

However, there are a large amount of conflicting reports of the effects and social repercussions of increased amounts of internet usage. Certain reports claim that internet usage increases social satisfaction and communication and supplement real world relationships (Wellman et al, 2001; Wellman, Boase & Chen, 2002).”I don’t really know people that make friends through Facebook, but maybe they make better friends through Facebook” (Ellison, 2007, p19). Lampe et al. (2007) propose that Facebook members use the site to maintain offline friendships and also use it to get to know new offline acquaintances better. Katz et al. (2001, p. 406) also found internet use has more positive consequences than negative and it’s use led to more face-to-face friendships and in contradiction to some research, suggested that the more time spent online, the more likely it was internet users will belong to a group or an offline community. Subsequent research also found the more time spent online the more likely



it was they would use the internet to “to engage in social-capital-building activities” (Kavanaugh & Patterson, 2001, p507). Various other studies also correspondingly found in a review that heavy users of the Internet use the internet to maintain relationships and not as a replacement of face-to-face contact (Wellman et al. 2001,p. 450; Flaherty et al, 2009; Haythornthwaite, 2002; Hampton, 2003). Facebook may be used to manage a large network of weak social ties (Ellison, 2007). It may serve to keep these ties connected, that without Facebook preserving them, would diminish.

However, using the internet is an isolated activity, between one person and a computer and in rebuttal, various reports claim that paradoxically, the internet which was intended to aid communication, has had a negative social impact (Hodgekinson, 2008, Stone, 2007). Whitty and McLaughlin (2007) claimed that those who are lonely are more likely to use the internet for entertainment purposes.

### **Rationale**

The evidence as previously discussed displays the need for up to date Facebook research. There are many open ended questions left and little consensus on data found amongst researchers. With reports showing such huge figures using Facebook, it is necessary to explore how this changes the role of socialization and communication, especially amongst Irish youth which have grown up immersed in the internet and technology era and to investigate if gender has a significant role. Facebook is chosen as the focus of the study as it is the most popular social networking site in contemporary culture (Bulik, 2007, Banks, 2011).

The aim of this study is to take the suggestions that overall internet usage may have a health and psychological impact and apply specifically to the Facebook site, which has been reported that people spend a significant amount of time on Facebook

via the Facebook intensity scale (Pempek, Yermolayeva & Calvert, 2008; Cassidy, 2006), and to determine if loneliness ensues as a result of many hours of Facebook usage, or if this usage alleviates loneliness via supplementing real world friendships. This loneliness is measured by the UCLA loneliness scale. It also aims to determine if Facebook usage positively or negatively affects self-esteem via the Rosenberg self-esteem scale, as a result of spending time browsing through their social groups photos and statuses.

The present study aims to provide some data addressing gender differences in regards to Facebook to make this study available to future researchers. The present study aims to investigate suggested gender differences via the connection strategies part of the Facebook intensity scale. This will provide data on what both sexes do whilst on Facebook and if there are any differences in how individuals spend their time on Facebook and if results correlate with past gender difference claims.

The demographics in this study measure age and gender. The Facebook intensity scale asks how much time is spent online and also questions how many Facebook friends one has, and of those how many of those Facebook friends would be considered real life, face-to-face friends. The present study aims to determine if age, gender, time spent online or amount of Facebook friends has any correlation with loneliness, self-esteem or impacts how people communicate online and what they do whilst online. This study also aims to determine if emotional attachment to Facebook correlates with the amount of time spent on Facebook, the amount of Facebook friends one has and the connection strategies one implements whilst on Facebook. It also aims to determine if any of the variables significantly correlate with one another, which may explain Facebook behaviours and add to the research concerning Facebook.

There is a gap in the area of up to date Facebook research, perhaps due to the fact that Facebook has gotten exceptionally popular in recent years. The present study aims to provide the first study looking at the relationship between Facebook usage, gender, emotional attachment, connection strategies, online vs. real world relationships and communication and loneliness in a single study, and provide up to date data in the ever-changing world of Facebook and its contemporary use and thoughts about it from the people who use Facebook. This study is open to those of all ages, in order to try get a broader view of Facebook and to determine if there is a difference in the way people of different ages use and feel about Facebook. This study aims to investigate if this new way of social communication has a positive or negative social impact.

A lot of existing Facebook data focuses on privacy concerns and how one portrays themselves online (Stutzman, 2006; Gross & Acquisti, 2005; Lipford, Besmer & Watson, 2008; Zhao, Grasmuck & Martin, 2008; Baden et al, 2009). The purpose of this study is to try fill in some of the gaps in Facebook research data and to investigate the relationship between Facebook usage and gender, emotional attachment, connection strategies, self-esteem and loneliness amongst Facebook users.

The aim of the study is to investigate if gender, emotional attachment, connection strategies and loneliness are significant variables in Facebook usage amongst students. The study endeavours to explore if the isolated activity of using Facebook has negative consequences. The study is carried out with optimism that it will add, mixed gender, all ages, up to date research in the ever changing use of Facebook in contemporary culture as a communication and social tool, which has significant social implications in the future.

The present study aims to evaluate if negative consequences, such as emotional attachment, more online vs. real world communication, low self-esteem or loneliness

may occur as a result of this growing dependence, and also to determine if gender plays a significant role. With the reported 259 average friend list (Zhao et al, 2008), investigation is also needed into how many of these friends would be considered “real life”, face to face friends and if friendship is maintained through Facebook or face to face contact, aiding future researchers in what Irish students do when they are on Facebook.

### **Research details**

This will be a quantitative, descriptive, cross-sectional, survey design, correlational study. The participants of this study are 98 Facebook users.

Questionnaires are being administered in 2 forms. The first is self-administered, pen and paper scales. The second is an online version, containing the same information as the paper version. The validity of web-based questionnaires been backed by several studies (Gosling et al, 2004, Labonte et al, 2012).

Together the questionnaires make up a 52 item scale.

The Facebook intensity scale (Ellison, N.B., Steinfield, C., & Lampe, C., 2007) is an 8 item scale, which will be used as a measure of time spent on Facebook and Facebook emotional attachment or “emotional connectedness” (p1), Also Facebook as a part of everyday life.

The actual friends scale (Ellison, N.B., Steinfield, C. & Lampe, C.,(2011) is a 1 item scale that measures real world vs. online friends.

The Connection Strategies scale (Ellison et al, 2011) is a 13 item scale that measures what people use Facebook for such as meeting people, browsing, contacting, using to maintain friendships and/or communication.

The Rosenberg Self-Esteem scale (Rosenberg, 1965) is a 10 item measure of self-esteem, perceived self-worth and feelings of adequacy.

UCLA Loneliness scale, revised version 3 (Russell, D., 1996). This is 20 item scale that measures levels of loneliness. Items included in the original scale were based on statements from lonely people describing loneliness. In this revised version the negative wording of the items has been removed and also it has been simplified in order to facilitate less educated populations.

A demographics questionnaire will also be used.

### **Hypothesis**

The main hypotheses under consideration in this investigative study are as follows:

1. There will be a significant gender difference on maintaining friends on Facebook
2. There will be a relationship between loneliness and the amount of time spent on Facebook.
3. There will be a relationship between self-esteem and the amount of time spent on Facebook.
4. There will be a significant gender difference in Facebook emotional attachment.
5. There will be a significant gender difference in the number of Facebook friends.
6. There will be a significant age correlation with the amount of Facebook use.
7. There will be a relationship between self-esteem, loneliness and Facebook intensity.

## **Methods**

### **Participants**

98 Participants took part in this research. Participants are from varied personal history and socio-economic backgrounds. The ages of the participants were aged from 18 upwards. Male and Female participants were accessed in this study. 62 of the participants are female and 32 of the participants are male. A young sample may be represented in this study, due to the samples accessed. The average age of friends on the wall it was posted on is 21, of which a large quantity of the sample was obtained.

The participants for this study consisted of a mixed sex convenience sample of family and friends, recruited as a convenience sample via posting the study questionnaire on a personal Facebook wall as an online survey and also, accessing a convenience sample via paper questionnaires. The participants also consisted of a sample of a modest number of DBS students, accessed via a lecturer giving permission to access the class.

### **Design**

This will be a quantitative, descriptive, cross-sectional, survey design, correlational study. It was distributed once and was not a repeated measure.

#### **Procedure:**

A request was made to a DBS lecturer for permission for students to participate in this research. Permission was granted and a modest number of DBS students undertook the paper booklet survey via paper and pen. Due to the modest sample of DBS students, the education level may not be significantly impacted.

The introduction included the following;

- a brief outline of the study being carried out
- participants asked to only take part if they are aged 18 and older
- to answer all questions in the booklet/survey
- asked to not write names on the sheet due to the anonymous nature of the study
- outlined the voluntary nature of the study
- outlined the right to withdraw at any time
- informing participants of clicking the submission button, they are giving permission for their data to be used as part of this research and cannot withdraw
- the researchers email for any queries regarding the study

The DBS students who undertook this were verbally informed of the voluntary, anonymous and withdrawal rights in this study. The right to object to participation was given opportunity.

In the online version of this study the paper questionnaire was replicated, but in an online form. It was posted on a personal Facebook wall as a voluntary participation. In this version, answering all questions is mandatory in order to proceed to the next page of questions.

The conclusion of the study consisted of;

- Informing participants their response is now recorded
- Thanking them for participating

- Made participants aware of the Samaritans, an organisation who provide emotional support phone number and email
- Made participants aware of mental health Ireland's phone number and email, an organisation providing support and promoting positive mental health.

## **Materials**

All participants were instructed to answer all questions in a questionnaire booklet, which consisted of the Facebook intensity scale (Ellison, Steinfield & Lampe, 2007), the actual friends scale (Ellison, Steinfield & Lampe, 2011), the connection strategies scale (Ellison et al, 2011) the self-esteem scale (Rosenberg, 1965) and UCLA the loneliness scale (Russell, 1996). The majority of participants completed an online version of the questionnaire, with the exact same information as the paper booklet version.

The questionnaire was introduced outlining why the study was being conducted, information about the anonymous nature of the research, the freedom to withdraw and introduced the researcher.

The study then consisted of 2 demographic questions, age and gender. A membership to Facebook question was also asked.

The item 8 Facebook intensity scale consisted of questions in regards to feelings toward belonging to the Facebook community, Facebook in regards to daily activity, keeping updated socially, regret if Facebook shut down, time spent on Facebook per day and number of Facebook friends. Responses are measured on a 5 point scale; strongly disagree, disagree, neither agree nor disagree, agree, strongly disagree.



The Actual Friends 1 item scale questioned the number of actual friends as opposed to online, Facebook friends.

The 13 item connection strategies scale consisted of 13 questions relating to meeting people on Facebook, Social information seeking such as browsing through profiles or contacting friends online, and maintaining friendships online such as contacting or adding friends online and also offline meeting face-to-face. Responses are measured on a 5 point scale; very unlikely, somewhat unlikely, neither likely nor unlikely, likely and very likely.

The Self-esteem scale is a 10 item scale containing questions in regards to perceived self-worth, self-satisfaction, feelings of failure, positivity toward self and negative attitudes toward self. Responses are measured on a 4 point scale; strongly agree, agree, disagree and strongly disagree.

The UCLA loneliness scale consists of 20 questions regarding feelings of belonging in social circles, feelings of loneliness, companionship, feelings of being understood, feelings of isolation and social support. Responses are measured on a 4 point scale; never, rarely, sometimes and often.

## RESULTS

### Descriptive Statistics

36 male respondents and 62 female respondents took part in this research. The average time spent on Facebook per day was 113.46 (SD= 121.62) minutes. Females reported spending more time on Facebook per day with an average of 127.88 (SD=147.13) minutes spent on Facebook per day, compared with the male 88.75 (SD=47.66) average daily minutes on Facebook.

Table 1 *Descriptive statistics for Gender*

<b>Gender</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>Male- timeperday</b>	36	88.75	47.66
<b>Female- timeperday</b>	62	127.88	147.13

### Facebook Friends

The actual friends scale (Ellison, Steinfield, & Lampe, 2011) measured the average number of Facebook friends as 362.29, (SD=224.93) the mean number of those friends considered real life friends was 78.22 (SD= 82.56). Males reported slightly more Facebook friends with a mean of 368.77 (SD=237.27) friends, compared with the female 358.53 (SD=219.33) average number of Facebook friends.

Table 2 *Descriptive statistics for friends*

	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>HowmanyFBfriends</b>	98	362.29	224.93
<b>Male</b>	36	368.77	247.27
<b>Female</b>	62	358.53	219.33
<b>FBrealfriends</b>	98	78.22	82.56

### **Loneliness**

The UCLA loneliness scale was used (Russell, D., 1996). The average loneliness level was 45.21 (SD= 4.57). This score indicates that the average loneliness level was normal. Scores from 40-60 are in the normal range.

### **Self-esteem**

The Rosenberg self-esteem scale was used (Rosenberg, 1965). The average self-esteem level was 21.08 (SD=5.60). Scores from 15-25 are in the normal range. Scores lower than 15 suggest low self-esteem. This displays the average level of self-esteem in this study was normal.

Table 3 *Descriptive statistics for loneliness and self-esteem*

	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>lonlinesstotal</b>	98	45.21	4.57
<b>Selfesteemtot</b>	98	21.08	5.60

### **Connection Strategies**

The connection strategies scale was used (Ellison et al, 2011). Respondents reported using Facebook more to Browse their close friends profiles (Mean= 1.89, SD= 1.09), as compared with contacting their close friends on Facebook (Mean = 1.62, SD= 1.03) or adding them (Mean= 1.33, SD= .87). Meeting their close friends face-to-face was the least likely (Mean = 1.33, SD= .79). A score of 1 indicates that they are very likely, 5 is very unlikely. These findings report that participants are likely to connect using all of these methods, however, are the most likely to browse.

Table 4 *Descriptive statistics for connection strategies*

	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>CloseFriend: Browse</b>	98	1.89	1.09
<b>CloseFriend: Contact</b>	98	1.62	1.03
<b>CloseFriend: Add</b>	98	1.35	.87

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<b>CloseFriend:</b>	<b>Meet</b>	98	1.33	.79
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**face-to-face**

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### **Facebook intensity**

The Facebook intensity scale (Ellison, Steinfield, & Lampe, 2007) measured attachment to the Facebook site. The mean was 20.31 (SD=5.48). A score of 30 is extremely high, 5 and less is low. The results suggest participants had a moderate Facebook attachment/intensity.

Table 5 *Descriptive statistics for Facebook Intensity*

	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>FBI</b>	98	20.31	5.48

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### **Gender differences in Facebook use**

There were no significant differences in the way the sexes use Facebook recorded with similar averages of initiating Facebook (males mean = 21.3, SD=3.2, female mean= 21.2, SD= 3.8), maintaining friendships on Facebook (males mean = 6.41, SD=3.05, female mean= 6.09, SD=2.95), social information seeking (males mean = 11.22, SD=3.67, female mean= 12.00, SD=3.80), loneliness levels (males mean = 46.19, SD=4.76, female mean= 44.64, SD= 4.39) and self-esteem levels (males mean = 20.69, SD= 5.74 female mean= 21.30, SD=5.56). These results indicate that there are no significant gender differences in regards to Facebook use.

Table 6 *Descriptive statistics for gender differences in Facebook use*

<b>male</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>female</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>Socialinfoseeking</b>	36	11.22	3.67	62	12.00	3.80	
<b>maintaining</b>	36	6.41	3.05	62	6.09	2.95	
<b>initating</b>	36	21.33	3.25	62	21.20	3.86	
<b>loneliness</b>	36	46.19	4.76	62	44.64	4.39	
<b>Self-esteem</b>	36	20.69	5.74	62	21.30	5.56	

### **Inferential statistics**

#### **Inferential statistics for gender influences**

An independent samples t-test was conducted to compare the gender scores for maintaining friendships via Facebook. There was no significant difference in the scores for males (M=6.41, SD= 3.05) and females (M=6.00, SD= 2.95);  $t(96) = .511$ ,  $p = .611$ . The magnitude of the difference in the means (mean difference = .31, CI= -.940 and 1.48) was very small. These results show that being male or female has no significant impact upon maintaining friendships via Facebook (table 1).

Table 1 – *Independent t tests for gender*

	Male			Female			t-test	Df	Sig. (2-tailed)
	N	Mean	SD	N	Mean	SD			
Maintaining	36	6.41	3.05	62	6.00	2.95	.511	96	.611

### **Emotional Attachment**

An independent samples t-test was conducted to compare the gender scores for emotional attachment to Facebook (as measured by the Facebook Intensity Scale). There was no significant difference in the scores for males (M=19.41, SD= 5.26) and females (M=20.83, SD= 5.58);  $t(96) = 1.240$ ,  $p = .218$ . The magnitude of the difference in the means (mean difference = -1.42, CI= -3.69 and .854) was very small. These results show that being male or female has no significant impact upon Facebook intensity/emotional attachment to Facebook (table 2).

Table 2 – *Independent t tests for Facebook intensity*

	Male			Female			t-test	Df	Sig. (2-tailed)
	N	Mean	SD	N	Mean	SD			
Facebook Intensity	36	19.41	5.26	62	20.83	5.58	1.240	96	.218

An independent samples t-test was conducted to compare the gender scores for the number of Facebook Friends. There was no significant difference in the scores for males (M=3.37, SD= 1.11) and females (M=3.53, SD= 1.34);  $t(70) = -.530$ ,  $p = .196$ . The magnitude of the difference in the means (mean difference = -1.62, CI= -.775 and .449) was very small. These

results show that gender has no significant impact upon numbers of friends on Facebook (table 3).

Table 3 – *Independent t tests for Facebook friends*

	Male			Female			t-test	Df	Sig. (2-tailed)
	N	Mean	SD	N	Mean	SD			
Facebook friends	27	3.37	1.11	45	3.53	1.34	-.530	70	.196

## Correlations

### Time spent on Facebook per day and Loneliness levels

The Relationship between Time spent on Facebook and loneliness levels (as measured by UCLA loneliness scale) was investigated using Pearson product-moment coefficient correlation. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a small negative correlation between the two variables,  $r=-.249$ ,  $n=98$ ,  $p=.014$ , with high levels time spent on Facebook moderately associated with lower loneliness levels (table 4). These results show that spending more time on Facebook slightly lower loneliness levels are reported.



Table 4 - *Correlation time and loneliness*

		Time per day	Loneliness total
timeperday	Pearson	1	-.249*
	Sig. (2-tailed)		.014
	N	98	98
Loneliness Total	Pearson	-.249*	1
	Sig. (2-tailed)	.014	
	N	98	98

\* Correlation is significant at the 0.05 level (2-tailed)

### **Time spent on Facebook and self-esteem levels**

The Relationship between Time spent on Facebook and self-esteem (as measured by the self-esteem scale) was investigated using Pearson product-moment coefficient correlation. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a small positive correlation between the two variables,  $r = .261$ ,  $n=98$ ,  $p=.009$ , with high levels time spent on Facebook moderately associated with high levels of self-esteem. These results show that spending more time on Facebook, moderately higher self-esteem levels are reported (table 5).

Table 5 - *Correlation time and self-esteem*

		Time per day	Selfesteemt
timeperday	Pearson	1	.261**
	Sig. (2-tailed)		.009
	N	98	98
Selfesteemt	Pearson	.261**	1
	Sig. (2-tailed)	.009	
	N	98	98

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\*\*Correlation is significant at the 0.01 level (2-tailed)

### **Age and Facebook Intensity**

The Relationship between Age and Facebook intensity was investigated using Pearson product-moment coefficient correlation. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a medium negative correlation between the two variables,  $r = -.346$ ,  $n = 98$ ,  $p = .000$ , with lower age levels associated with high levels of Facebook Intensity. These results show that as age goes up, Facebook intensity goes down (table 6).

Table 6 - Correlation age and Facebook Intensity (FBI)

		age	FBI
Age	Pearson	1	-.346**
	Sig. (2-tailed)		.000
	N	98	98
FBI	Pearson	-.346**	1
	Sig. (2-tailed)	.000	
	N	98	98

\*\*Correlation is significant at the 0.01 level (2-tailed)

### Facebook intensity, Loneliness and Self-esteem.

The Relationship between Facebook intensity, loneliness and self-esteem was investigated using Pearson product-moment coefficient correlation. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a medium negative correlation between Facebook intensity and Loneliness,  $r = -.382$ ,  $n = 98$ ,  $p = .000$ , with high levels of Facebook intensity associated with lower loneliness levels.

There was no significant correlation between Facebook intensity and self-esteem,  $r = .185$ ,  $n = 98$ ,  $p = .068$ .

There was a medium negative relationship between Self-esteem and Loneliness,  $r = -.331$ ,  $n = 98$ ,  $p = .001$ , with high self-esteem levels associated with lower loneliness levels.

Therefore, the higher your self-esteem is the less lonely you are.

Table 7 - Correlation loneliness, self-esteem and Facebook Intensity (FBI)

		FBI	Lonelinesstotal	Selfesteemtot
FBI	Pearson	1	-.382**	.185
	Sig. (2-tailed)		.000	.068
	N	98	98	98
Lonelinesstotal	Pearson	-.382**	1	-.331**
	Sig. (2-tailed)	.000		.000
	N	98	98	98
selfseteemtot	Pearson	.185	-.331**	1
	Sig. (2-tailed)	.068	.000	
	N	98	09	98

\*\*Correlation is significant at the 0.01 level (2-tailed)

## **DISCUSSION**

### **Aim of this Research**

The aim of this research study was to investigate the relationship between Facebook usage, gender, emotional attachment, connection strategies, online vs. real world relationships, self-esteem and loneliness. The hypotheses under investigation in this study are:

1. There will be a significant gender difference relationship on maintaining friends on Facebook.
2. There will be a relationship between loneliness and the amount of time spent on Facebook.
3. There will be a relationship between self-esteem and the amount of time spent on Facebook.
4. There will be a significant gender difference in Facebook emotional attachment.
5. There will be a higher use of Facebook to browse, than engaging in direct communication with close friends.
6. There will be a significant age correlation with the amount of Facebook use.
7. There will be a relationship between self-esteem, loneliness and Facebook intensity.

## **Discussion of findings**

### **Hypothesis 1**

This study found little support for the relationship between statistically significant differences in how the sexes maintain friendships on Facebook. Males were found to be slightly more likely to maintain friendships on Facebook than females. There is evidence to suggest Facebook is primarily used to maintain relationships (Ellison et al, 2007; DiMiccio & Millen, 2007; Ross et al, 2009, Gangadharbatla, 2008). There was limited research available in regards to gender differences whilst using Facebook. However, there is research to suggest females are more likely to use Facebook (Acquiti & Gross, 2006; Joinison, 2008), which was not supported by the present research findings. Li and Kirpup (2007) the proposed differences in how males and females regard using the computer and that males regard it as more of a toy as opposed to viewing the computer as a tool. There is also evidence that proposes males are more concerned with peer acceptance and status in a social network (Benenson, 1990), which may impact the way males maintain friendships on Facebook. The present research endeavoured to determine if there was a significant gender difference in how males and females maintain these relationships. No significant difference was found, suggesting males and females use Facebook similarly to supplement and maintain their relationships. The present research findings suggest that in regards to maintaining friendships on Facebook that these proposed differences are minute.

### **Hypothesis 2**

This study found that there was no statistically significant gender difference in emotional attachment levels toward Facebook. This research does not support suggestions

that there are gender differences in Facebook use. Jonsson (2007) proposed the internet is more male dominated. Males were also proposed to have more confidence and be more likely to use computers than females (Yau & Cheng, 2012), which did correlate with this study's findings. There is evidence to suggest females are more likely to develop an emotional attachment (Lithari et al, 2010; Barrett et al, 1998). Females had a slightly higher mean which is in keeping with research that suggests females are marginally more likely to develop an emotional attachment; however the findings were not significant. A 2009 study, in parallel to the present study also found gender differences on Facebook insignificant (Cain, Scott & Akers). There was little research available in regards to gender differences on Facebook. This research proposes that gender does not have a significant impact upon emotional attachment levels to Facebook and that both sexes are similarly likely to develop and emotional attachment to Facebook.

### **Hypothesis 3**

This study found that there is no statistically significant correlation between the number of Facebook friends and gender. These findings are in keeping with research that suggests there are no significant differences in how males and females use Facebook (Cain, Scott & Akers, 2009). Benenson (1990) proposes that males are focused on peer acceptance, desirable attributes and status in a social network, whilst females are concerned with friendship, this research was not reflected through Facebook friends, as there was no significant difference. Deaux (1984) found gender as a social category's impact is substantial, whilst this study's findings did not find gender a significant factor in regards to the social factor of Facebook friends. The mean of Facebook friends in this study was 362, (SD=224). These findings are above 2008 findings of 259 as an average amount of Facebook friends

(Zhao et al.). There was limited research available in regards to gender differences in Facebook friends.

#### **Hypothesis 4**

This study found a moderate correlation between time per day spent on Facebook and loneliness levels, and that as time per day went up, loneliness levels decreased. This data suggests that using Facebook moderately alleviates loneliness. These findings are in keeping with research that suggests that the more time spent on the internet, an increase in social satisfaction and communication ensues and this time online can help supplement real world relationships (Wellman et al, 2001, Wellman, Boase & Chen, 2002).

Kiesler et al (2002) found in that once families join individuals online, the effects of loneliness as a result of internet use are diminished, as it is then a social norm to communicate via the internet. Katz et al (2001) found that internet use aids real world relationships and leads to more face-to-face relationships, thus alleviating loneliness, which is what the present study found. The lessened loneliness levels in regards to Facebook use may be explained through the following research. The more time spent online may be correlated with engaging more in social capital building activities (Kavanagh & Patterson, 2001). Those who are lonelier may find refuge online and utilise the internet as a social tool, in order to alleviate loneliness (Whitty & McLaughlin, 2007). Facebook may serve as a tool to maintain a large network of weak friendships (Ellison, 2007), thus friendships do not completely die out with time, they remain. This may broaden an individual's social network and create a less lonely social circle.



Facebook enables connections that without it, would not occur. The present research findings suggest that Facebook lowers loneliness levels through supplementing and aiding maintenance of already established friendships. This Facebook use seems to be a substantial form of social interaction, thus, lowering loneliness levels.

### **Hypothesis 5**

This study found that there small correlation between time per day spent on Facebook and self-esteem levels, and that as time per day went up, self-esteem went up. This data suggests using Facebook may have moderate self-esteem benefits. These findings are in keeping with research that suggests time on as time on Facebook increased, self-esteem increased (Denti et al, 2012).

Research suggests viewing Facebook can boost your self-esteem and those who edit their profiles to depict themselves best had the highest self-esteem (Gonzales & Hancock, 2011). Gosling et al (2011) also found that using Facebook can boost self-esteem by creating a more favourable online world. These findings suggest that using Facebook may boost your self-esteem through selective self-presentation and receiving positive feedback on this presentation. These findings are in contrast to reports that using Facebook is damaging to self-esteem (Mehdizadeh, 2010; Krasanova et al, in press; Loechner, 2013; Denti et al, 2012).

The present study's findings do not support the proposal that Facebook use lowers self-esteem. Not using Facebook has been found to create higher self-esteem (Loechner 2013), however not being on Facebook may lower self-esteem as without it, an individual may be missing out on communication, information and social feedback via Facebook. Positive social feedback has been found to increase self-esteem (Valkenberg, Peter &

Schouten, 2006), which may aid understanding how Facebook can boost self-esteem. Facebook can be used to maintain friendships (Ellison et al, 2007, DiMicco & Millen, 2007, Ross et al, 2009, Gangadharbatla, 2008), maintaining a large network of friends may boost self-esteem. Time spent on Facebook has been found to moderately increase self-esteem in this study.

### **Hypothesis 6**

This study found a medium correlation between age and Facebook intensity, as age goes up Facebook intensity goes down. 90% of Irish Facebook users are aged 15-24 years old, Nine of Ten Irish 15-24 year olds have Facebook (Comscore & MRBI, 2011). This suggests that the youth are more intense and emotionally attached Facebook users. This research is in keeping with research which suggests the Irish youth use Facebook more than any other group. Very little research was available in regards to Facebook intensity or Facebook use and age. This study proposes that Facebook, which is a relatively new site, is most popular amongst youth due to computers being more accessible in contemporary Irish culture and the popularity of internet.

### **Hypothesis 7**

This study found a medium correlation between Loneliness and Facebook intensity levels and that as Facebook intensity goes up, loneliness goes down. This suggests that using Facebook at a higher intensity aids loneliness levels. This is parallel with research that suggests Facebook relieves loneliness through connecting people (Kiesler et al, 2002; Ellison et al, 2001; Wellman, Boase & Chen, 2002, Lampe et al, 2007). The findings are in contrast

to Nie & Erbing (2000) who found that internet use creates loneliness and detracts from real world relationships. Katz et al (1001) found internet use has more positive consequences than negative and leads to more face-to-face friendships, not take away from them.

There was no significant correlation between Facebook intensity and self-esteem. This suggests that the more you view Facebook as part of your daily life, routine and something to be proud of has little impact upon self-esteem. Mehdizadeh (2010) found those who logged into Facebook more times throughout the day had lower self-esteem, this study found that Facebook intensity has very little effect upon self-esteem.

There was a medium negative relationship between Self-esteem and Loneliness. Therefore, the higher your self-esteem is the less lonely you are. Self-esteem can be described as the extent of belief in their capability, worth, and significance” (Wilson et al, 2010 p 1), therefore the higher you view your self-worth, the less likely you are to be lonely. This research suggests the better you feel about yourself the less lonely you are likely to be. This is in parallel with research using the UCLA loneliness scale that loneliness and self-esteem have a negative correlation (Stephan & Lamm, 1988). Perlman & Peplau (1982) also found low self-esteem to be correlated with feelings of loneliness.

## **Practical Implications**

The results of the present study fill in the gap of gender differences in Facebook use, of which little information is presently available. The relationship between Facebook and its social consequences is an underlying theme throughout this research. This research aids determining if Facebook is damaging and if its use should be restricted. This research has found that Facebook has positive social consequences and positive consequences upon individuals, in general. Heavier users of Facebook benefited the most from it, such as less loneliness and increased self-esteem. Negative reports of Facebook's impact have been proposed (Loechner 2013; Suval, 2012; Muise et al, 2009; Kalpidou et al, 2011; Kraut et al; 1998; Nie, 2001). This study finds that in contrast, Facebook used is beneficial. This research is useful in regards to parental and school concerns about Facebook use.

## **Weaknesses and criticisms of research**

A weakness of this research study was that all written participants were from the same college. Also the participants obtained from Facebook were from an individual personal wall, with a limited geographical background. This might make the results difficult to generalise. Therefore further research should include participants from various colleges and geographical areas.

Another weakness of this study was the reliability of the responses of the participants. The majority of participants were recruited online, they may not have adequately understood the questions being asked and only had the opportunity to ask questions via the email provided. The fact that they completed the questionnaire from a personal computer, it is

likely they completed it in a home setting. This setting may also have influenced their responses.

The self-report method used may have led to unreliable answers. The participants were also aware of the psychological nature of the study, that it was concerning Facebook attitudes, which may have induced a social desirability when responding, in order to produce socially desirable responses (ie. Sitting on Facebook for 6 hours daily is not socially desirable, thus may have affected the honesty of the responses).

Another limitation to this study is that it was a one-time study. If tested twice, it may have more reliable answers (Ie. Mood, stress, personal issue factors).

Finally, the questionnaire was administered in two separate ways. This may have affected the way the paper questionnaire and online questionnaire respondents answered, as the administration and setting in the paper and online versions are very different.

## **Future Research**

Future research would be advised on evaluating the positive Facebook effects this study found, and determining, despite the previously mentioned negative reports of Facebook use, if Facebook use truly benefits self-esteem and loneliness levels. Testing twice would provide reliable results.

There are no reports available as to the long-term effects of Facebook use. A longitudinal paper could provide insight into Facebook's changing role in society, its long-term effects and aid determining if its use diminishes as participant's age.

## **Conclusion**

Ultimately, this study reports that Facebook use is not detrimental toward mental health and it may promote positive self-esteem and lower loneliness levels. Facebook may aid social bonds and keeps these bonds from discontinuing. Facebook seems to be most popular amongst the youth, and the youth most intensely use Facebook. This study has identified that age is a significant factor in regards to attachment to Facebook. Facebook can be used as a passive, recreational and social activity; browsing is most popular on Facebook.

This study identified no gender differences in Facebook use, despite research suggesting differences may exist. This study has provided research in the area of gender and Facebook research, in which there is presently very little research. Furthermore, this study has provided relevant, up-to date Irish statistics on Facebook use. This study has provided a broad view on Facebook use, as it included all ages from 18 onwards, and represents an older sample, as well as young.

The present study has identified the discrepancies between online friends and face-to-face friends.

This research has highlighted the unanswered questions in regards to Facebook and the need for longitudinal investigation in order to attempt to answer these.

## REFERENCES

Acquisti, A., & Gross, R. (2006). *"Imagined communities: Awareness, information sharing, and privacy on the Facebook"*. Privacy Enhancing Technologies Workshop (PET), retrived jan 17th, 10.01pm: <http://www.heinz.cmu.edu/~acquisti/papers/acquisti-gross-facebook-privacy-PET-final.pdf>

Andrews, F. M. (1991) *Measures of Personality and Social Psychological Attitudes*. Elsevier. P1.

Altheide, D. L. (2000). Identity and the definition of the situation in a mass-mediated context. *Symbolic Interaction*, 23(1), 1–27.

Baden, R., Bender, A., Spring, N., Bhattacharjee, B. & Starin, D. (2009) *Persona: an online social network with user-defined privacy*. In ACM SIGCOMM, Barcelona, Spain

Banks, E. (2011) *Facebook Is Most Popular Social Network for All Ages; LinkedIn Is Second* [STUDY]

Barrett, L. F, Robin, L., Pietromonaco, P. R. & Eyssell, K. M. (1998). Are Women the “More Emotional” Sex? Evidence From Emotional Experiences in Social Context. *Cognition & Emotion*. 12(4), 555-578

Benenson, J. F. (1990) Gender Differences in Social Networks. *The Journal of Early Adolescence*. 10(4), 472-495

Berg, P., Paxton, S. J., Keery, H., Wall, M., Guo, J. & Neumark-Sztainer, D. (2007) Body dissatisfaction and body comparison with media images in males and females. *Body Image*. 4, 257- 268

Boyd, D. (2006) *Friends, friendsters, and myspace top 8: Writing community into being on social network sites*. Retrieved 02/03/13 4.46pm: <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1418/1336>

Bulik, B. S. (2007). Apple, Facebook tops for college students. *Advertising Age*, 78, P12.

Bumgarner, B. A. (2007) You have been poked: Exploring the uses and gratifications of Facebook among emerging adults. *First Monday* 12(11-5)

Brandtzaeg, P. B., Luders, M. & Skjetne, J. H. (2010) Too Many Facebook “Friends”? Content Sharing and Sociability Versus the Need for Privacy in Social Network Sites. *International Journal of Human-Computer Interaction* 26(10-11), 1006-1030

Cacioppo JT, Hawkley LC, Berntson GG, et al. (2002) Do lonely days invade the nights? Potential social modulation of sleep efficiency. *Psychol Sci* 13, 384 –7

Cain, J., Scott, D. R. & Akers, P. (2009) Pharmacy Students' Facebook Activity and Opinions Regarding Accountability and E-Professionalism. *Am J Pharm Educ.* 73(6), 104

Cain, K. (2012) *The Negative Effects of Facebook on Communication*. Retrieved 24/03/13, 5.48pm: <http://socialmediatoday.com/kcain/568836/negative-effects-facebook-communication>

Cassidy, J. (2006, May 15). *Me media*. *The New Yorker*, 50–59.

Condon, J. T. (2011) The assessment of antenatal emotional attachment: development of a questionnaire instrument. *British Journal of Medical Psychology* 66(2), 167-183

Christofides, E., Muise, A. & Desmarais, S. (2009) More Information than You Ever Wanted: Does Facebook Bring Out the Green-Eyed Monster of Jealousy? *CyberPsychology & Behavior*. 12(4), 441-444



Comscore & MRBI, 2011, *Irish social media statistics*, retrieved from <http://blog.newworld.com/2011/irish-social-media-statistics/> on 9/11/12.

Denti, L., Barbopoulos, I., Nilsson, I., Holmberg, L., Thulin, M., Wendeblad, M. & Davidsson, E. (2012) *Sweden's Largest Facebook Study: A Survey of 1,000 Swedish Facebook Users*. Gothenburg Research Institute, Retrieved 02/03/13, 3.02pm: [https://gupea.ub.gu.se/bitstream/2077/28893/1/gupea\\_2077\\_28893\\_1.pdf](https://gupea.ub.gu.se/bitstream/2077/28893/1/gupea_2077_28893_1.pdf)

Deaux, K. (1984). From individual differences to social categories: Analysis of a decade's research on gender. *American Psychologist*. 39(2), 105-116

Debatin, B. & Lovejoy, J. P. (2009) Facebook and Online Privacy: Attitudes, Behaviors, and Unintended Consequences. *Journal of computer-mediated communication*. 15(1), 83-108

DiMiccio, J. M. & Millen (2007) *Identity management: multiple presentations of self in facebook*. Proceedings of the 2007 international ACM conference on Supporting group work, p383-386

Doane, L. D. & Adam, E. K. (2009) Loneliness and cortisol: Momentary, day-to-day, and trait associations. *Psychoneuroendocrinology* 35(3), 430 – 41

Dwyer, C., Hiltz, S. R., & Passerini, K. (2007). *Trust and privacy concern within social networking sites: A comparison of Facebook and MySpace*,'' Proceedings of AMCIS 2007, Keystone, Co. Retrieved 26/1/13 11.01pm, <http://csis.pace.edu/~dwyer/research/DwyerAMCIS2007.pdf>

Eid, M., & Larson, R. J., (2008). *The Science of Subjective Well-Being*. The Guilford Press, New York, pp.379

Ellison, N. B. (2007) *Facebook use on campus sites: A social capital perspective on social networking sites*. Retrieved 01/03/13, 6.25pm: <http://net.educause.edu/ir/library/pdf/ecr0713.pdf>

Ellison, N.B., Steinfield, C., & Lampe, C. (2007) the benefits of Facebook “friends” social capital and college students use of online social network sites, *Journal of computer-mediated communication*, 12, 1143-1168.

Ellison, N.B., Steinfield, C. & Lampe, C.,(2011) connection strategies: social capital implications of Facebook enabled communication practises, *new media & society*.13(6), 873-892

Facebook Press (2013). retrieved from <http://newsroom.fb.com/Key-Facts>, 10/1/13, 8.28pm

Facebook site (2013) retrieved from <https://www.facebook.com/pages/Waking-up-checking-your-FB-like-its-the-morning-paper/111219182298599>, 10/01/13 8.38pm

Flaherty, L. M., Pearce, K. J. & Rubin, R. B. (2009) Internet and face-to-face communication: Not functional alternatives. *Communication quarterly*. 46(3), 250-268

Froh, J. J., Fives, C. J., Fuller, J. R., Jacosfky, M. D., Terjesen, M. D. & Yurkewicz, C. (2007). Interpersonal relationships and irrationality as predictors of life satisfaction, *The Journal of Positive Psychology*, 2(1), 29–39

Gangadharbatla, H. (2008) Facebook me: Collective self-esteem, need to belong and internet self-efficacy as predictors of the ingeneration’s attitudes toward social networking sites, *Journal of interactive advertising* 8(2), 5-15

- Gosling, S. D., Augustine, A., Vazire, S., Holtzman, N., & Gaddis, S. (2011). Manifestations of Personality in Online Social Networks: Self-Reported Facebook-Related Behaviors and Observable Profile Information. *Cyberpsychology, Behavior & Social Networking*, 14(9), 483-488.
- Gosling, S. D., Vazire, S., Srivastava, S. & John, O. J. (2004) Should We Trust Web-Based Studies? A Comparative Analysis of Six Preconceptions. About Internet Questionnaires. *American Psychologist* 59(2), 93-104.
- Gonzales, A. L. & Hancock, J. T. (2011). Mirror, Mirror on my Facebook Wall: Effects of Exposure to Facebook on Self-Esteem. *Cyberpsychology, Behavior, and Social Networking*. 14(1-2), 79-83
- Gross, R., & Acquisti, A. (2005). *Information revelation and privacy in online social networks*. Paper presented at the WPES'05, Alexandria, Virginia.
- Hampton, K. N. (2003) Grieving for a lost network: Collective action in a wired suburb. *The information Society*, 18(5), 385-401
- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: Guilford Press. Pp.142.
- Haythornthwaite, C. (2002). Strong, weak and latent ties and the impact of new media. *The information society*. 18(5), 385-401
- Hodgkinson, T. (2008). *With friends like these ...*The Guardian. Retrived from <http://www.guardian.co.uk/technology/2008/jan/14/facebook> On 9/11/12.
- Joinson, A. N. (2008). *Looking at, looking up or keeping up with people? Motives and use of facebook*. In: Proceedings of CHI '08. ACM, New York, NY, pp. 1027–1036

Jonsson, F. (2007). *"The Absence of Hackerettes in the Culture of Programming"*. In Elm, M. S.; Sundén, J. *Cyberfeminism in Northern Lights: Digital Media and Gender in a Nordic Context*. Cambridge Scholars Publishing. pp. 243–264.

Justice, E., (2007). *Facebook suicide: the end of a virtual life*, The Times.

Katz, J. E, Rice, R. E. & Aspden, P. (2001). The Internet,1995–2000. *American Behavioural Scientist* 45:405–19

Kavanaugh, A.L. & Patterson, C. J. (2001). The impact of community computer networks on social capital and community involvement. *American Behavioural Scientist*. 45(3), 496–509

Kiecolt-Glaser JK, Ricker D, George J, et al. (1984) Urinary cortisol levels, cellular immunocompetency, and loneliness in psychiatric inpatients. *Psychosom Med* 46(1), 15–23.

Kiesler, S., Kraut, R., Cummings, J., Boneva, B., Helgeson, V., & Crawford, A. (2002) Internet evolution and social impact. *IT & Society*, 1(1), 120- 134

Kalpidou, M., Costin, D. & Morris, J. (2011) The relationship between Facebook and the well-being of undergraduate college students. *Cyberpsychol Behav Soc Netw*.14(4), 183-189

Kraut et al, (1998), Internet paradox. A social technology that reduces social involvement and psychological well-being? *American psychologist*, 53(9), 1017-1032

Krasnova, H., Wenninger, H., Widjaja, T. & Buxmann, P. (In press) *Envy on Facebook: A Hidden Threat to Users' Life Satisfaction?* Retrieved 02/03/13 4.13pm: [http://warhol.wiwi.huberlin.de/~hkrasnova/Ongoing\\_Research\\_files/WI%202013%20Final%20Submission%20Krasnova.pdf](http://warhol.wiwi.huberlin.de/~hkrasnova/Ongoing_Research_files/WI%202013%20Final%20Submission%20Krasnova.pdf)

Labonte, M. E., Cyr, A., Baril-Gravel, L., Royer, M. M. & Lamarche, B. (2012) Validity and reproducibility of a web-based, self-administered food frequency questionnaire. *Eur J Clin Nutr.* 66(2), 166-73

Lee, D (2012). *BBC News*, retrieved from <http://www.bbc.co.uk/news/technology-19816709>, 13/1/13 5.35pm.

Lenhart, A., Purcell, K., Smith, A. & Zickuhr, K. (2010) *Social media & Mobile internet use among teens and young adults*, retrieved from [http://web.pewinternet.org/~media/Files/Reports/2010/PIP\\_Social\\_Media\\_and\\_Young\\_Adults\\_Report\\_Final\\_with\\_toplines.pdf](http://web.pewinternet.org/~media/Files/Reports/2010/PIP_Social_Media_and_Young_Adults_Report_Final_with_toplines.pdf), 17/1/13 10.32pm

Li, N. & Kirkup, G. (2007) Gender and cultural differences in Internet use: A study of China and the UK. *Computers & Education.* 48(2), 301-317

Lipford, H.R., Besmer, A., & Watson, J., (2008), “*Understanding Privacy Settings in Facebook with an Audience View*”, in Usability, Psychology, and Security 2008.: San Francisco, CA

Lithairi et al. (2010) Are Females More Responsive to Emotional Stimuli? A Neurophysiological Study Across Arousal and Valence Dimensions. *Brain Topogr* 23(1), 27–40

Loechner, E. (2013) *How Quitting Facebook Radically Altered My Self-Esteem*. Retrieved 02/03/13, 3.24pm: <http://www.babble.com/babble-voices/erin-loechner-first-time-around/2013/01/30/how-quitting-facebook-radically-altered-my-self-esteem/>

Markoff, J. (2002) *How lonely is the life that is lived online?* The new York times, p. c3

Mehdizadeh, S. (2010). Self-Presentation 2.0: Narcissism and Self-Esteem on Facebook. *Cyberpsychology, Behavior & Social Networking*, 13(4), 357-364

Moscaritolo, A. (2012) *Low-Self Esteem? Steer Clear of Facebook*. Retrieved 02/03/13, 9.56pm: <http://www.pcmag.com/article2/0,2817,2399819,00.asp>

Muise, A., Christofides, E. & Desmarais, S.(2009) More Information than You Ever Wanted: Does Facebook Bring Out the Green-Eyed Monster of Jealousy? *CyberPsychology & Behavior* . 12(4), 441-444

Nie, N. H. (2001). Sociability, interpersonal relations, and the Internet: Reconciling conflicting findings. *American Behavioural Scientist*, 45(3), 420–35.

Nie, N. H. & Erbring, L. (2000). *Internet and Society: A Preliminary Report*. Stanford Inst. Quant. Study Soc., Stanford, CA

Park, N., Kee, K. F., Valenzuela, S. (2009) Being Immersed in Social Networking Environment: Facebook Groups, Uses and Gratifications, and Social Outcomes. *CyberPsychology & Behavior*. 12(6), 729-33.

Pempek, T. A., Yermolayeva, Y. A. & Calvert, S. L. (2008) College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*. 30(3), 227-238

Perlman, D., & Peplau, L. A. (1981). *Toward a social psychology of loneliness*. In S. W Duck & R. Gilmour (Eds.), *Personal Relationships*. 3:Personal relationships in disorder). Pp.31-56. London: Academic Press.

- Peplau, L. A. & Perlman, D. (1982) *Perspectives on loneliness*. In Peplau, L. A. & Perlman, D. (eds) *Loneliness: A sourcebook of current theory, research and therapy* (1-20). New York: John Wiley and Sons
- Reber, A. S., Allen, R. & Reber, E. S. (2009). *The penguin dictionary of psychology*, 4<sup>th</sup> edn., London: Penguin, p748
- Richins, M. L. (1991) Social Comparison and the Idealized Images of Advertising. *Journal of Consumer Research*. 18(1), 71-83
- Rodgers, P. (2007). In Justice, E., *Facebook suicide: the end of a virtual life*, The Times.
- Ross, C., Orr, E.S, Sisic, M, Simmering, M. G., Orr, R. R. & Arseneault, J.M. (2007) Personality and motivations associated with Facebook use. *Computers in Human Behavior* 25(2), 578-586
- Russell, D. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66, 20-40.
- Smith, J (2008). *Mapping Facebook over time*, retrieved from <http://www.insidefacebook.com/2008/08/19/mapping-facebooks-growth-over-time/>, on 13/1/13, 5.30pm.
- Spear, P. S. & Armstrong, S. (1987). Effects of performance expectancies created by peer comparison as related to social reinforcement, task difficulty, and age of child. *Journal of Experimental Child Psychology*. 25(2), 254–266
- Spears, R., Postmes, T., Lea, M. & Wolbert, A. (2002). When are net effects gross products? The power of influence and the influence of power in computer-mediated communication. *J. Soc. Issues* 58(1), 91–107

Stephan, E., Faeth, M., & Lamm, H. (1988). Loneliness as related to various personality and environmental measures: Research with the German adaptation of the UCLA Loneliness Scale. *Social Behavior and Personality*, 16, 169–174.

Stone, B. (2007, July 30). *New scrutiny for Facebook over predators*. The New York Times. Retrieved from <http://www.nytimes.com/2007/07/30/business/media/30facebook.html> on 08/11/12

Stutzman, F. (2006, April). *An evaluation of identity-sharing behavior in social network communities*. Paper presented at the iDMAa and IMS Code Conference, Oxford, Ohio.

Turow, J. & Kavanaugh, A.L. (2003). *The Wired Homestead*. Cambridge, MA: MIT Press

Valkenberg, P. M., Peter, J. & Schouten, A. P. (2006) Friend Networking Sites and Their Relationship to Adolescents' Well-Being and Social Self-Esteem. *CyberPsychology & Behavior*. 9(5), 584-590

Van Praag. H.M. (2004) *stress, vulnerability and depression*. New York. Cambridge university press.

*Waking up and checking your Facebook like it's the morning newspaper*. Retrieved from <https://www.facebook.com/pages/Waking-up-checking-your-FB-like-its-the-morning-paper/111219182298599>, 10/01/13 8.38pm

Walther, J. B., Van Der Heide, B., Hamel, L. M. & Shulman, H. C. (2009) Self-Generated Versus Other-Generated Statements and Impressions in Computer-Mediated Communication: A Test of Warranting Theory Using Facebook. *Communication Research* 36(2), 229-253



Wellman, B., Haase, A. Q., Witte, J., & Hampton, K. (2001). Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment. *American Behavioral Scientist*, 45(3), 436-55

Wellman, B., Boase, J., & Chen, W. (2002) The networked nature of community; offline and online. *IT & Society*, 1(1), 151- 165

Whitty, M. T. & McLaughlin, D. (2007). Online recreation: The relationship between loneliness, Internet self-efficacy and the use of the Internet for entertainment purposes. *Computers in Human Behavior*. 23(3), 1435–1446.

Wilson, K., Fornasier, S., & White, K. M. (2010). Psychological Predictors of Young Adults' Use of Social Networking Sites. *Cyberpsychology, Behavior & Social Networking*, 13(2), 173-177.

Wise, K., Alhabash, S. & Park, H. (2009). Emotional Responses During Social Information Seeking on Facebook. *Cyberpsychology, Behavior, and Social Networking*. 13(5), 555-562

Yau, H. K. & Cheng, A. L. F. (2012) Gender Difference of Confidence in Using Technology for Learning. *Educational Technology*. 38(4), 56-61

Zakowski, S., Hall, M. H., & Baum, A. (1992). “Stress, stress management, and the immune system”. *Applied and Preventive Psychology*, 1, 1-13.

Zhao, S., Grasmuck, S. & Martin, J. (2008) Identity construction on Facebook: Digital empowerment in anchored relationships. *Computers in Human Behavior*. 24(5), 1816-1836

Zuckerberg, M (2009). Via Vogelstein, F., *The Wired Interview: Facebook's Mark Zuckerberg*, retrieved from <http://www.wired.com/business/2009/06/mark-zuckerberg-speaks/>,  
13/1/13 6.13pm

## APPENDICES

My name is Valerie Burke. I am currently a 3rd year psychology student.

I am conducting my research to determine the relationship between Facebook and Emotional Attachment, Loneliness and Self-Esteem.

This research is being conducted as part of my studies and will be submitted for examination.

All data is confidential and none of questions will ask to identify you, therefore participation in this study is strictly anonymous. Please do not write your name on the survey. This study is voluntary and should you feel at any time you would not like to take participate, feel free to end participation and leave.

Once data is submitted, participation cannot be withdrawn and it cannot be taken back, as one participants responses cannot be distinguished from the other due to the anonymous nature of the survey.

The collected data will be securely stored and available only to the research supervisor and myself.

Please only take part if you are 18 years old and above.

By submitting the data you are giving consent for your data to be used as part of my research.

This Survey should take 5-10 minutes to fill out.

I am available to respond to any queries regarding this study at;

████████████████████

Thank you for taking the time to complete this survey.

Please tick the appropriate box;

AGE	
18-21	
22-25	
25-30	
30-35	
35-40	
40-45	
45-50	
50+	

Please tick the appropriate box;

GENDER	
male	
female	

Please indicate the extent to which you agree with the following statements;

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. Facebook is part of my everyday activity					
2. I am proud to tell people I'm on Facebook					
3. Facebook has become part of my daily routine					
4. I feel out of touch when I haven't logged into Facebook for a while					
5. I feel I am part of the Facebook community					
6. I would be sorry if Facebook shut down					

7. Approximately how many Total Facebook friends do you have?

---

8. In the past week, on average, approximately how much time PER DAY have you spent actively using Facebook?

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9. Approximately how many of your TOTAL friends do you consider actual friends?

---

**Imagine A student from your college you've never met in real life or had a face-to-face conversation with. How likely are you to do the following?**

	Very Unlikely	Somewhat Unlikely	Neither likely nor unlikely	Somewhat likely	Very likely
1. College Stranger: Browse their profile of Facebook					
2. College Stranger: Contact them using Facebook, or by using information from Facebook					
3. College Stranger: Add them as a Facebook friend					
4. College Stranger: Meet them face-to-face					
5. I use Facebook to meet new people					

**Please indicate the extent to which you agree with the following statements;**

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
6. I have used Facebook to check out someone I met socially					
7. I use Facebook to learn more about other people in my classes					
8. I use Facebook to learn more about people living near me					
9. Someone in residence hall: Browse their profile on Facebook					

**Think about one of your close friends, how likely are you to do the following?**

	Very Unlikely	Somewhat Unlikely	Neither likely nor unlikely	Somewhat likely	Very likely
10. Close Friend: Browse					
11. Close Friend: Contact					
12. Close Friend: add as Friend					
13. Close Friend: Meet face-to-face					

**Instructions:** Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, tick Strongly Agree. If you agree with the statement, tick Agree. If you disagree, tick Disagree. If you strongly disagree, tick Strongly Disagree.

	Strongly Agree	Agree	Disagree	Strongly disagree
1. I feel that I am a person of worth, at least on an equal plane with others.				
2. I feel that I have a number of good qualities.				
3. All in all, I am inclined to feel that I am a failure.				
4. I am able to do things as well as most other people.				
5. I feel I do not have much to be proud of.				
6. I take a positive attitude toward myself.				
7. On the whole, I am satisfied with myself.				
8. I wish I could have more respect for				

myself.				
9. I certainly feel useless at times.				
10. At times I think I am no good at all.				

**Instructions:** The following statements describe how people sometimes feel. For each statement, please indicate how often you feel the way described by ticking the appropriate box.

Here is an example: Now often do you feel happy?

If you never felt happy, you would respond "never": if you always feel happy, you would respond "always."

Statement	Never	Rarely	Sometimes	Often
*1. How often do you feel that you are "in tune" with the people around you?				
2. How often do you feel that you lack companionship?				
3. How often do you feel that there is no one you can turn to?				
4. How often do you feel alone?				
*5. How often do you feel part of a group of friends?				
*6. How often do you feel that you have a lot in common with the people around you?				
7. How often do you feel that you are no longer close to anyone?				
8. How often do you feel that your interests and ideas are not shared by those around you?				
*9. How often do you feel outgoing and friendly?				
*10. How often do you feel close to people?				
11. How often do you feel left out?				
12. How often do you feel that your relationships with others are not meaningful?				
13. How often do you feel that no one really knows you well?				
14. How often do you feel isolated from others?				



*15. How often do you feel you can find companionship when you want it?				
*16. How often do you feel that there are people who really understand you?				
17. How often do you feel shy?				
18. How often do you feel that people are around you but not with you?				
*19. How often do you feel that there are people you can talk to?				
*20. How often do you feel that there are people you can turn to?				

Your response has been recorded.

Thanks again for participation in this research.

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Mental Health Ireland supports positive mental health and aims to provide support

[info@mentalhealthireland.ie](mailto:info@mentalhealthireland.ie)

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