

Adult Attachment Styles, Loneliness, Gender, Age and their relationship to Social Media Addiction.

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Declaration

‘I declare that this thesis that I have submitted to Dublin Business School for the award of BA (Hons) Psychology is the result of my own investigations, except where otherwise stated, where it is clearly acknowledged by references. Furthermore, this work has not been submitted for any other degree.’

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Abstract

The following study aimed to explore the relationship between attachment styles, gender, age and loneliness in relation to social media addiction. Participants (N=99) were required to be above 18 years of age and to currently use social media. Participants were recruited online via social networking sites where a link was posted to the survey. The survey consisted of the measurement of attachment qualities to measure secure, avoidant and ambivalence-worry and ambivalence merger attachment styles, along with UCLA loneliness measure and the Bergen Social Media Addiction Scale. The results found there was a significant positive correlation attachment styles and loneliness levels. There was a significant relationship between attachment and social media addiction. Furthermore, there was a positive correlation between loneliness and social media addiction. Also, women were statistically significant in social media addiction levels. Finally, age was negatively correlated with loneliness and social media addiction levels.

1.0 Introduction

From a Medical perspective, addiction is defined as a compulsive drug use despite its negative outcomes (Koob, 2003). In contrast, researchers such as Becker (1992) view addiction as a strong habit. The definition of addiction as a habit would describe it as a behavioural pattern that is automatic and triggered by a situation (Altman, 2015). Kuss and Billieux (2017) state internet addiction is an umbrella term and consists of a wide range of problematic online activities for individuals including online gaming, gambling and social media use.

To date, there is no agreement amongst researchers on what defines problematic social media use (Wegmann, Stodt & Brand, 2015; Wan, 2009). However, many different theoretical models have provided explanations in what defines social media addiction (Turel & Serenko, 2012). The definition that this study will use is one from the biopsychosocial model which is concerned with behavioural addictions in general (Griffiths, 2003). According to Griffiths (2005) the biopsychosocial model defines social media addiction as having a wide range of addiction symptoms. These symptoms include excessive social media use that affects mood, being totally preoccupied with social media, increasing tolerance for social media use, negative psychological symptoms if social media is abstained from, problems with relationships due to social media and excessively using social media after a time of abstinence (Griffiths, 2005).

Nowadays, the term social media addiction is a common reading in headlines and has been described as excessive social media use (Kan & Kaya, 2016). Current research shows that social media use has grown rapidly in recent years with statistics showing that annually there is a 10% increase in users (Hawi & Samaha, 2016). Researchers Kan and Kaya (2016) suggest that smartphones are contributing to the overuse of social media sites since they are so prevalent in everyday life.

Research interest in social media has grown in recent years because the number of individuals using these sites is increasing (Perrin, 2015). In recent decades it has been shown that rapid development of social networking sites has changed the way people interact and communicate (Smith & Anderson, 2018; Stone & Wang, 2019). Studies indicate that prolonged use of social media can be related to mental health problems such as stress, anxiety, and depression (Malik & Khan, 2015; Marino et al., 2017; Pantic, 2014; Shakya & Christakis, 2017). However, Jelenchick et al., (2012) found that there was no significant difference between depression and social media use. Research carried out by Jaremka et al., (2012) found that those suffering with depression also had high levels of loneliness.

1.1 Attachment

Attachment can be defined as an affectional tie that one person has to another specific person and this affectional bond can endure through space and time (Ainsworth & Bell, 1970). Attachment theory was developed by John Bowlby and further expanded on by Mary Ainsworth (Bretherton, 1992). Bowlby (1982, 1973, 1980) was the first to develop a theory of attachment. Bowlby and Robertson (1952) observed that when children were separated from their mother it caused severe distress, even when other caregivers fed them. This was fundamental as it contradicted the dominant behavioural theory of attachment (Dollard & Miller, 1950) which stated that children were attached to their mother for food. Bowlby's theory of attachment had further support from the work of Lorenz (1935) and Harlow (1958). Harlow's research on rhesus monkeys illustrated that the monkey preferred the cloth mother

over the feeding mother. The rhesus monkey would always go to the cloth mother in times of distress and would explore more when the cloth mother was present. Bowlby believed that behavioural problems and mental health could be attributed to our affectional bonds in early life (Holmes, 2014). Moreover, Bowlby stated that infants are biologically programmed to form attachments and that these attachment behaviours are instinctual (Siegler et al, 2011). Bowlby (1969) stated that children develop an inner working model which is based on their environment and interactions. The infants inner working model is based on their early relationship to their mother or caregiver and applies it to their future relationships (Bowlby, 1969). Therefore, the infant's childhood relationship can have a significant influence in later life.

Mary Ainsworth further expanded on this theory on her research known as the strange situation which investigated how attachments vary between children. The strange situation involved a child being observed in a room playing while their caregivers and strangers enter and leave the room to observe how the child would react (Ainsworth & Bell, 1970). Ainsworth discovered that there were three different attachment types, secure attachment, insecure avoidant and insecure ambivalent. In the secure attachment type, the infant uses the caregiver as a secure base from which the child will explore their environment when the caregiver is present (Ainsworth, Blehar, Waters & Wall, 2015). The infant shows clear distress when separated from the caregiver and will immediately calm down when the caregiver returns. The ambivalent/resistant infant will also be distressed on separation (Ainsworth, Blehar, Waters & Wall, 2015). However, on return of the caregiver the infant will ignore or resist contact with the caregiver when reunited. The avoidant infant may or may not show signs of distress when separated from their caregiver. However, the infant will ignore the caregiver when reunited (Ainsworth, Blehar, Waters & Wall, 2015). The following study is using the Measurement of

Attachment Qualities which assesses four distinct attachment qualities, instead of merging these with others (Carver, 1997). The four attachment qualities are secure, avoidant, ambivalence-worry and ambivalence-merger. For the avoidance attachment quality, the individual will try to distance oneself from becoming attached or developing feelings for others because of earlier relationships not relieving their distress (Mikulincer, Gillath & Shaver, 2002). Ambivalence-worry attachment quality will be worried their loved ones may abandon them (Carver, 1997). Furthermore, ambivalence-merger attachment qualities will be worried that others do not want to be as close to them as they would like (Carver, 1997).

1.2 Attachment and Social Media Addiction

Researchers Mikulincer and Shaver (2005) suggested that in adulthood attachment style tends to stabilise and found that adults high in attachment anxiety tend to have poor self-image and a strong need for interpersonal support and closeness. In contrast, however, anxious adults were found to tend to be preoccupied about the inconsistent availability of others and fear rejection or abandonment. Other studies found that adults with a secure attachment style have a tendency towards care-oriented feelings and caregiving behaviours, in contrast with various forms of insecure attachment styles suppressing or interfering with compassionate caregiving (Mikulincer, Shaver, Gillath & Nitzberg, 2005).

According to Monacis, Palo, Griffiths and Sinatra, (2017) attachment styles are an important factor for predicting online addictions and are understudied in previous literature. Insecure attachment style and avoidant attachment style have been found to be associated with internet addiction (Severino and Craparo, 2013). Furthermore, Oldmeadow, Quinn and Kowert (2012)

explored attachment styles, social skills and facebook use. They hypothesised there would be a significant relationship between attachment styles and facebook use. Participants were recruited in several ways where some received compensation or course credit and others received no incentive. The scale measuring attachment measured avoidant and anxious attachment styles only. The study found individuals with anxious attachment types were more likely to spend longer on facebook especially whilst in a negative mood. Also, there was no relationship between avoidant attachment type and time spent on facebook. Although, this research further shows evidence that attachment styles are associated with Facebook it cannot be generalised to other social media platforms. Also, participants were given incentives to participate which raises ethical considerations. Incentives encourage higher levels of survey responding. Thus, they may not be a great representation of the population.

Furthermore Lin (2015) looked at the role of attachment in relation to social capital and Facebook use. The measurement for attachment was need for connectedness. The study was employed in both students and a national sample to allow for more generalisation of the population. It was found that secure attachment type had indirect effects on social capital through Facebook usage.

In addition, Eroglu (2015) hypothesised that people that have difficulty in maintaining real life relationships will use Facebook more and this may result in addiction. Moreover, Eroglu (2015) states that secure attachment will be negatively associated with Facebook addiction. Avoidant attachment types will be positively associated with Facebook addiction. To test this the relationship scale questionnaire was used to measure attachment and the Bergen Facebook

Addiction scale was distributed among Turkish students. Eroglu found that those with secure attachment styles were less likely to have an addiction to Facebook. Those students with avoidant attachment types were more likely to be addicted to Facebook.

Further research in attachment styles differences and online addictions was carried out by Monacis, Palo, Griffiths and Sinatra (2017). The study involved participants from schools and colleges answering questionnaires on attachment style questionnaire, internet addiction test, internet gaming disorder and Bergen social media addiction scale. The questionnaire took a total of fifteen minutes. The study aimed to explore if there was a difference in attachment styles and online addictions. They discovered that attachment styles are important in predicting addiction to online activities. Moreover, secure attachment was shown to be significant in people not developing online addictions. Anxious attachment was shown to predict the likelihood of that individual having gaming addiction, internet addiction or social media addiction. However, the study employed convenience sampling strategies so it is not a good representative of the population. Attachment styles have also been shown to be predict loneliness levels (Erozkan, 2011). Erozkan (2011) found that fearful, preoccupied and dismissive attachment styles were positively correlated with loneliness. Moreover, secure attachment style was negatively correlated with loneliness levels. This indicates that attachment styles can play an important role in predicting loneliness levels. The current study aims to further explore attachment styles in relation to loneliness levels. Also, the current study aims to rectify this by recruiting participants outside of colleges since previous researchers have primarily recruited university students. Also, there will be no incentives used in the research. Moreover, the study aims to use a different measurement of attachment to the ones previously employed from the above research to see if this yields different results.

1.3 Loneliness and Social Media Addiction

Loneliness can be defined as negative feelings that are associated with one's perception that their social needs are not being met. One may feel disconnected or socially isolated from others (Hawkley & Cacioppo, 2010). Previous research on loneliness identified loneliness as a risk factor associated with internet addiction. Munoz-Rivas et al., (2010) carried out a study to look at the relationship between time spent online and different variables of pathological and addictive tendencies. Results found that problematic internet use interfered with their family, social and professional lives. Also discovered a significant difference in individuals using the internet to relieve feelings of loneliness. On the contrary, Ranaey et al., (2016) carried out research with the purpose of investigating the effect of loneliness on time spent on social networking sites. One hundred and fifty-six students were given a survey which included the internet use scale, internet behaviour scale and UCLA loneliness scale. There was no significant difference found between loneliness and average weekly hours spent on social networking sites. Thus, it shows individuals are not accessing social media because of loneliness.

On the contrary Yang (2016) further explored the association between loneliness and specific social networking site activities. The research was carried out on undergraduate students ranging from the age of 18-25 years of age, each student was given questionnaires measuring Instagram usage and loneliness using the UCLA loneliness scale. It was found that activities that were interactive and passive (browsing) were associated with lower levels of loneliness.

Activities related to broadcasting which are non-interactive were associated with higher levels of loneliness. Therefore, this research suggests that Instagram followers might be seeking attention through broadcasting activities but when not getting appropriate responses it could be leading to their higher levels of loneliness.

In addition, Ozdemir, Kuzucu and Ak (2014) aimed to explore the relationship between depression, loneliness and low self-control in relation to internet addiction in Turkish students. They discovered that there was a significant relationship between loneliness and internet addiction but not between depression and internet addiction. However, since the research was carried out on students between the age of 18-33 years of age. It does not give a good representation of the population. Furthermore, Zhou and Leung (2012) carried out research amongst college students aged eighteen to twenty-two that play social networking site games. The purpose of the study was to identify predictors of social networking site gaming addiction. They found that loneliness was positively correlated with social networking site game use. Lonely individuals were more likely to go online to converse with others with similar interests. However, the internal reliability of the measures was low but the researchers did not show how low the Cronbach alpha levels were which is hard to know how reliable the research is. Bozoglan, Demirer and Sahin (2013) further researched whether loneliness, self-esteem and life satisfaction predicted internet addiction among university students. However, the results showed that the majority of students were not addicted to the internet and were not lonely.

Loneliness has also been shown in previous research to have a relationship to age. Luhmann and Hawkley (2016) conducted a study to investigate if loneliness was prevalent amongst older people. It found loneliness levels were highest among older people. In addition, Tumkaya,

Aybek and Celik (2008) explored loneliness levels among Turkish students. The mean age was twenty-three and found that as age increased so did loneliness levels. The researcher stated this increasing loneliness may be due to life stressors since it is nearer their graduation. Furthermore, they stated that the pressure of finding a job and being successful in exams may contribute to the loneliness levels as students may self-isolate. The current study aims to look at age and loneliness levels among individuals that are not students. This will further add to research as a lot of previous research is among students only and the students are significantly younger with not a lot of older people to compare against. The study aims to correct this by having a wide variety of ages from eighteen years and above.

Also, the current research aims to further explore the relationship between loneliness and social media addiction since previous research shows conflicting evidence. It also aims to source participants outside of colleges so that the sample will be a better representation of the population.

1.4 Gender, Age and Social Media Addiction

According to Perrin (2015) women were most likely to use social networking sites for a longer amount of years compared to men. However, Perrin (2015) states that in recent years this is changing and men are increasing their use of social networking sites too. Today 68% of women are now using social networking sites and 62% of men are using them also which shows the gap is decreasing (Perrin, 2015). Research shows that social media addiction has a higher

prevalence in females when compared to men (Andreassen, Pallesen & Griffiths, 2017; Griffiths, Kuss & Demetrovics, 2014; Andreassen, 2015). On the contrary, Olowu and Seri (2012) found that more males are actually using social media compared to females. Furthermore, they found that both males and females felt they were spending too much time on social media and that it hindered their productivity. In addition, Jafarkarimi, Sim, Saadatdoost and Hee (2016) carried out research amongst Malaysian students. The study found no significant difference in gender and Facebook addiction.

Research into gender and social networking has shown conflicting evidence into gender differences and social media use. Research carried out by Salehan and Negahban (2013) found that both men and women were likely to become addicted to smartphones. However, because of the unequal proportion of women to men ratio the results of this study might not be significant because of it.

Furthermore, Cam and Isbulan (2012) carried out research on teacher candidates and found males were more likely to be addicted to facebook when compared to women. Also, found there was a significant difference in levels of Facebook addiction in seniors when compared against juniors, sophomores and freshman.

Contrary to Salehan and Negahban (2013) research carried out has shown that there is a significant difference in gender and addiction (Griffiths et al., 2014, Ryan et al., 2014). Studies suggest that women are more likely to become addicted to social media when compared to men. The above research on gender difference in relation to addiction shows conflicting

evidence. The current research aims to further explore gender and addiction because of these findings.

Research carried out by Kirik, Arslan, Cetinkaya and Gul (2015) on young Turkish people aged between fourteen to eighteen years of age found that age had a significant relationship with social media addiction. They found fourteen-year olds addiction levels were significantly lower but as age increased it showed an increase in addiction levels. However, eighteen-year olds showed a decrease in addiction levels. Furthermore, research carried out by McAndrew and Jeong (2012) further supports that age plays a role in the amount of time spent on Facebook. The researchers found that older people spent less time on facebook. Moreover, Jafarkarimi, Sim, Saadatdoost and Hee (2016) found in college students in Malaysia below 29 years of age there was no significant difference in age and facebook addiction. The current study aims to further add to the literature by looking at age in relation to social media addiction and not just facebook. Also, the current study is looking at addiction levels after the age of 18 to see if this yields different results and is recruiting participants that are not university students so that it is a better representative of the population.

1.5 Rationale

Early attachment relationships play a significant influence in later life (Bowlby, 1969). The current study aims to explore the different attachment styles in relation to social media addiction. Previous research carried out by Severino and Craparo (2013) and Monacis, Palo, Griffiths and Sinatra (2017) found that attachment had a significant relationship to social media addiction. The previous studies found that avoidant attachment styles were associated with internet addiction. However, the current study aims to add to the literature by using a different measure for attachment styles. Previous research has used the experience in close relationships

measure (e.g. Oldmeadow et al., 2013; Hart et al., 2015). This study will use the measurement of attachment qualities which looks at secure, avoidant, ambivalence-worry and ambivalence-merger attachments qualities instead of the experiences in close relationships measure which only looks at avoidant and anxious attachment styles. Moreover, the current study aims to explore the relationship between attachment styles and loneliness levels.

Furthermore, the current research will look at loneliness levels in relation to social media addiction. Previous research carried out by Zhou and Leung (2012) found that individuals were more likely to be addicted to social networking site games if their loneliness levels were high. In addition, Bozoglan, Demirer and Sahin (2013) found loneliness levels accounted for most of the variance in social media addiction. However, they state the majority of their participants were not lonely or addicted to the internet. The current study aims to further explore loneliness and social media addiction but by using a sample of individuals that are not recruited from university. Previous research has focused on university students (e.g. Zhou & Leung, 2012; Bozoglan, Demirer & Sahin, 2013).

Moreover, the current study aims to further explore the relationship of age and loneliness levels. Tumkaya, Aybek and Celik (2008) researched loneliness levels and age but the sample was obtained from university students. Whereas, the current research will obtain data from a sample outside of university which will add to the current literature. Finally, the study will explore gender in relation to social media addiction. Previous literature has shown conflicting results. Cam and Isbulan (2012) found that males were more likely to be addicted to facebook. Whereas, Andreassen, Pallesen and Griffiths (2017) and Griffiths, Kuss and Demetrovics (2014) found that females were more likely to be addicted to social media. Therefore, the

current study aims to further explore the relationship between gender and social media addiction because of these conflicting findings.

Hypotheses

H1- It is hypothesised that there will be a significant relationship between secure, avoidant, ambivalence-worry, ambivalence-merger attachment qualities and loneliness levels.

H2- It is hypothesised that there will be a significant relationship between secure, avoidant, ambivalence-worry, ambivalence-merger attachment qualities and social media addiction levels.

H3- It is hypothesised that there will be a significant difference between gender and levels of addiction to social media.

H4- It is hypothesised that there will be a significant difference between lonely versus non-lonely participants and their levels of social media addiction.

H5- It is hypothesised that there will be a significant relationship between loneliness and social media addiction levels.

H6- It is hypothesised that there will be a significant relationship between age and levels of loneliness.

H7- It is hypothesised that there will be a significant relationship between age and levels of social media addiction.

2.0 Methods

2.1 Participants

The participants that were used for the current study were both males and females that used social networking sites to varying degrees. In order to gain access to the sample, a convenience sampling method was employed in conjunction with a snowballing method since participants were asked to share the link with others. Participants were recruited online where links to the questionnaire were posted via social networking sites and through email. The participants were asked to check the consent box if they wanted to participate. 116 participants filled out the online survey. Out of the 116 participants, 17 participants were excluded for incomplete questionnaires. 72.7% were female and only 27.3% were male. The majority of the participants were aged 18-24 (N=44, 44.4%), 25-34 (N=29, 29.3%), and 35+ years (N=26, 26.2%). Inclusion criteria were participants aged 18 and above that used social networking sites. Exclusion criteria were people under the age of 18 years. No incentives or rewards were given to participants.

2.2 Design

The study is a quantitative non-experimental design with a correlational aspect. The study includes self-report measures to collect the relevant data. Participants will be assessed on their social media addiction, attachment qualities and loneliness scores. For hypothesis one, attachment qualities were the predictor variables and loneliness was the criterion variable. Hypothesis two, attachment qualities were the predictor variables and social media addiction was the criterion variable. For hypothesis three, the independent variable was gender and the

dependant variable was levels of social media addiction. Hypothesis four, the independent variable was lonely versus non-lonely individuals and social media addiction was the dependant variable. for hypothesis five, the predictor variable was loneliness and the criterion was social media addiction. Hypothesis six, age groups was the predictor variable and loneliness was the criterion variable. Finally, hypothesis seven, age groups was the predictor variable and social media addiction was the criterion variable.

2.3 Materials

Questionnaires were accessed through an online survey link that was posted on social networking sites and via email. The questionnaire pack consisted of six sections which included the information sheet (See Appendix A), demographic questions (See Appendix B), Bergen Social media addiction scale (See Appendix C), Measurement of Attachment Qualities scale (See Appendix D), UCLA loneliness scale (See Appendix E) and finally a debrief sheet (See Appendix F). The information sheet included information on the study and a consent box. Participants were then asked to answer demographics on their gender and age. Participants were required to then answer three published questionnaires these were The Bergen Social Media Addiction Scale (Andreassen et al., 2016), The Measurement of Attachment Qualities (Carver, 1997) and The UCLA loneliness scale (Russell, Peplau & Ferguson, 1978). Finally, participants were shown a debrief sheet which signposted them to support sites and thanked them for their participation.

The Bergen Social media addiction scale (Andreassen et al., 2016) consists of six items and was used to measure participants addictive use of social media. The Bergen Social Media

Addiction Scale (BSMAS) was formulated from the Bergen Facebook Addiction Scale (BFAS) which has shown reliable and valid psychometric properties in many studies (Andreassen et al., 2012, 2013 ; Phanasathit, Manwong, Hanprathet, Khumsri & Yingyeun, 2015 ; Wang, Ho, Chan & Tse, 2015). The BSMAS was modified by replacing Facebook with Social Media. The scale is based on general addiction theory and measure social media addiction from six basic addiction symptoms which are salience, conflict, mood modification, withdrawal tolerance and relapse (Griffiths, 2005). All questions are related to participants experiences in the last year (Andreassen et al., 2016). The questionnaire is a 5-point likert scale and ranges from 1= very rarely to 5= very often with no neutral response. For example, participants were asked “How often during the last year have you used social media in order to forget about personal problems?”. The BSMAS is computed by totalling the participants scores and the higher the score the more addicted the participant. Andreassen et al., (2016) showed that the BSMAS has an internal reliability of Cronbach’s alpha of .88.

The Measurement of Attachment Qualities (MAQ) was formulated by Charles S Carver (1997). The MAQ is a 14-item scale and was adapted from lists reported by Simpson (1990) and Collins and Read (1990) with some newly written items. Most of the Collins and Reads (1990) items relating to ambivalent were retained with an addition of one new item. Items for avoidance were taken from both instruments with only minor word changes. For secure attachment style several new items were written. The MAQ has four subscales which are secure, avoidant, ambivalence-worry and ambivalence-merger. Secure attachment consists of three items and an example of one item is “ It feels relaxing and good to be close to someone”. For avoidance attachment style it included five-items and an example of one item is “I prefer not to be close to others”. For ambivalence-worry there are three-items which include statements like “I often worry that my partner doesn’t really love me”. Finally, ambivalence-merger had three items in

total and included statements such as “I find others are reluctant to get as close as I would like”. The responses are on a four-point likert scale which ranges from 1 = I disagree with this statement a lot to 4 = I agree with this statement a lot. There was no neutral response. Items for each subscale are added to determine the sub-scale score with higher scores indicating higher levels of the attachment quality. Items 4, 8, 9 were reverse coded. The Cronbach’s alpha to check internal reliability was .69 for security, .74 for avoidance, .71 for ambivalence-worry and .74 for ambivalence-merger (Carver, 1997).

The UCLA loneliness scale was formulated by Russell, Peplau, and Ferguson (1978). The UCLA loneliness scale was formulated to measure general loneliness that was shorter in nature to previous measures of loneliness. Initially 25-items were selected from a 75-item loneliness scale that was developed by Sisenwein (1964). Sisenwein’s scale also included statements from a scale developed by Eddy (1961). From the initial 25-items, there was 20-items chosen which made up the final loneliness scale. An example of one statement in the scale is “ I find myself waiting for people to call or write”. The responses are on a 4-point likert scale which range from 1 = never to 4 = often with no neutral response. The scale is scored by making all nevers equal to 0 and all oftens equal to 3. The items are then added up to get a total. The current study will also split loneliness levels into non-lonely and lonely individuals similar to how Ranaey et al., (2016). This will be done by taking the bottom 25% of scores as non-lonely and the top 25% of scores will be in the category as lonely. The higher the score the more loneliness. The internal reliability for the scale is very high with a Cronbach’s alpha of .96.

2.4 Procedure

An online questionnaire was developed using KwikSurveys. To gain access to the sample the questionnaire link was posted on various networking sites such as Facebook, Instagram and Twitter. The link was also shared through email and participants were asked to share the link further. Prior to the questionnaire being answered participants were shown an information sheet. The information sheet gave a general overview of the study and informed participants that it was completely anonymous.

It was stated that the survey may cause minor negative feelings for some and if this occurs support services are listed on the final page. Participants were informed of their right to withdraw and it was explained that because it is anonymous then once it is submitted it is not possible to withdraw. Finally, it was mentioned that all participants had to be above the age of 18 years. After the survey was submitted participants were shown a debrief sheet with relevant support sites and thanking them for their participation.

2.5 Ethics

Ethical approval for the current study was initially obtained from Dublin Business School Department of Psychology Ethics Committee. The Psychological Society of Ireland (2019) code of Ethics was adhered to throughout the study. Respect for the rights and dignity was adhered to by respecting the confidentiality of participants by making sure the data was de-identified and stored on a password protected computer. Participants were informed should the dissertation be published that there would be no identifiable information. On the information sheet participants were told only those above 18 years could participate. Furthermore, participants could give informed consent by ticking the consent box. The only compulsory question was the consent box and all other questions were non-compulsory so participants

could answer only ones they felt comfortable answering. Competency was adhered by having a list of supports for participants should negative feelings arise. Participants were informed that they had the right to withdraw at any time once the questionnaire was not submitted.

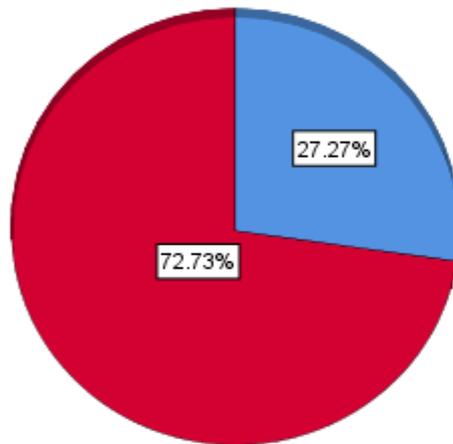
3.0 Results

3.1 Descriptive statistics

All data collected was analysed using SPSS Statistics version 26. Initially there was a total of (n=116) participants. However, due to incomplete questionnaire responses 17 participants need to be excluded from the data which left a total of 99 participants. The descriptive statistics of gender showed that 72.7% of participants were female (N=72) and 27.3% (N= 27) were male. See figure 1 below for breakdown percentage of gender. Forty-four of the participants were aged between 18-24 (44.4%), twenty-nine were in the category of 25-34 (29.3%), seventeen were between 35-44 (17.2%), four were aged between 45-54 (4%) and five participants were between 55-64 (5%).

A Pie Chart showing the percentage of Gender Breakdown

Gender
Male
Female



Descriptive statistics were conducted to obtain the means, standard deviations, minimum and maximum scores for loneliness levels, social media addiction levels and secure, avoidant, ambivalence merger and ambivalent worry attachment patterns. The mean score for secure attachment style was 10.12 (SD=1.83). The range of possible scores for secure attachment style was between 3-12. Therefore, the mean score shows a high secure attachment style overall. The minimum and maximum score for security were 4 and 12. The mean score for avoidance attachment style was 10.5 (SD=3.26). The range of scores for avoidance attachment were between 5 and 20. The mean score of 10.5 was mid-range which indicates moderate levels of avoidance attachment style. The minimum score was 5 and the maximum score was 19. The ambivalence worry attachment style had a mean score of 6.36 (SD=2.51) with a range of scores from 3 to 12. Thus, the mean shows that the ambivalence worry attachment styles were mid-range which indicates moderate levels of ambivalence worry. The mean score of ambivalence merger attachment pattern had a mean score of 6.11 (SD=2.00) with scores ranging from 3-12. The mean of 6.11 indicates moderate levels of ambivalence merger attachment style.

The Bergen Social Media Addiction Scale had a mean of 14.95 (SD=5.83) with a range of possible scores from 6 to 30. Therefore, the mean of 14.95 shows mid-range levels of social media addiction which means there is moderate levels of addiction. The minimum score was 6 and the maximum score was 28. The Bergen Social Media addiction responses consisted of 93 respondents with 6 missing from the sample.

The UCLA loneliness scale had a mean score of 22.34 (SD=14.95) with a range of possible responses from 0 to 60. Therefore, the mean score of 22.34 shows low levels of loneliness overall in the sample. The minimum score was 0 and the maximum was 60. Overall, the UCLA

loneliness scale had a total of 88 respondents with 11 missing in the sample. See Table 1 below for descriptive statistics breakdown of psychological measures.

Table 1: *descriptive statistics for psychological measures*

Variable	N	Mean	SD	Min	Max
Secure	98	10.12	1.83	4	12
Avoidance	96	10.5	3.26	5	19
Ambivalence	96	6.36	2.51	3	12
Worry					
Ambivalence	96	6.11	2.00	3	12
Merger					
Loneliness	88	22.34	14.95	0	60
Social media	93	14.95	5.83	6	28
Addiction					

All of the scales of measurement and subscales were tested for their internal reliability using Cronbach's alpha in SPSS (See Table 2 below for Cronbach's alpha level of each measure). For the measurement of attachment qualities scale, secure attachment had 98 participants and a Cronbach's alpha level of .63 which is below the satisfactory level. Avoidance attachment style had a total of 96 participants and a Cronbach's level of .73 which is considered satisfactory. Ambivalence worry had 96 in total and a Cronbach's alpha of .73. However, ambivalence merger had a level of .68 which is below the satisfactory level. In the item statistics table and item total statistics all the items are positive with no negative values. For

the Bergen social media addiction scale the Cronbach's alpha coefficient is .86 which is considered preferable level of internal reliability. All the items are positive in the item statistics table and item total statistics table. For the UCLA loneliness scale, it shows the highest internal reliability which is .96.

Table 2: *reliability for psychological measures*

Measure	Number of items	Cronbach's alpha
Secure	3	.66
Avoidant	5	.73
Ambivalence worry	3	.73
Ambivalence merger	3	.68
Social media addiction	6	.85
Loneliness	20	.96

3.2 Inferential statistics

Hypothesis 1 stated that there would be a significant relationship between secure, avoidant, ambivalence-worry, ambivalence-merger attachment qualities and loneliness levels. See Table 3 below for spearman's rho correlation of loneliness levels and attachment qualities. Preliminary analysis showed the relationships to be monotonic per visual inspection of a simple scatterplot. The spearman's rank order correlation coefficient showed a weak positive relationship between loneliness levels and avoidant attachment qualities $R_s(86) = .333, p = .002$. This relationship for loneliness and avoidance accounts for 11% of the variance. There

was a moderate positive relationship between loneliness levels and ambivalence-worry attachment qualities $R_s(86) = .497, p < .001$. The relationship between loneliness and ambivalence-worry accounts for 24.7% of the variance. There was a moderate to strong positive correlation between loneliness levels and ambivalent-merger attachment qualities $R_s(86) = .508, p < .001$. The relationship between ambivalent-merger and loneliness accounts for 25.8% of the variance. There was no significant relationship found between loneliness levels and secure attachment qualities. Therefore, the null hypothesis can be rejected.

Table 3: Spearman's Rho table to show loneliness and attachment qualities

		Loneliness	Secure	Avoidant	Ambivalence Worry	Ambivalence Merger
Loneliness	Correlation	1.000	-.003	.333**	.497**	.508**
	coefficient					
	Sig (2 tailed)	.	.979	.002	.000	.000
	N	88	88	87	86	86

** . Correlation is significant at the .01 level (2-tailed).

Hypothesis 2 stated that there would be a significant relationship between social media addiction levels and secure, avoidant, ambivalent-worry, ambivalent-merger attachment qualities. Preliminary analysis showed the relationship to be monotonic between the variables, via visual inspection of a scatterplot. A Spearman's Rank Order Correlation Coefficient was conducted and found a weak positive correlation between social media addiction levels and

avoidant attachment qualities $R_s(88) = .223, p = .034$. This relationship accounts for 4.9% of the variance. There was a weak positive relationship between social media addiction and ambivalent-worry attachment qualities $R_s(89) = .283, p = .007$. This relationship accounts for 8% of the variance. There was a moderate positive relationship between social media addiction and ambivalent-merger attachment qualities $R_s(89) = .421, p < .001$. This relationship accounts for 17.7% of the variance. There was no significant correlation found between social media addiction levels and secure attachment qualities. See Table 4 below which shows a Spearman's rho for social media levels and attachment types. Therefore, the results above show that the null hypothesis can be rejected.

Table 4: *Spearman's Rho table to show social media addiction levels and attachment qualities*

		Social media addiction	Secure	Avoidant	Ambivalent Worry	Ambivalent Merger
Social Media Addiction	Correlation	1.000	.019	.223 *	.283**	.421**
	Sig (2-tailed)		.858	.034	.007	.000
	N		92	90	91	91

*. Correlation is significant at the .05 level (2-tailed).

**. Correlation is significant at the .01 level (2-tailed).

Hypothesis 3 stated that there would be a significant difference between gender and levels of social media addiction. Preliminary analyses showed that the histogram was slightly positively skewed, the z-values for both male and female were within the range of +1.96 to -1.96 and Q-Q plots for both male and females showed only slight deviations along the line. Outliers were found and excluded before an independent sample t-test could be conducted. An independent samples t-test found that there was a statistically significant difference between social media addiction levels of males ($M=12.67$, $SD= 5.29$) and females ($M =15.57$, $SD = 5.69$). ($t (90) = -2.19$, $p = .031$, $CI (95\%) -5.54 \rightarrow -.27$). Therefore, the null hypothesis can be rejected.

Hypothesis 4 stated that there will be a significant difference between lonely versus non-lonely participants and their levels of social media addiction. Preliminary analysis showed a slight skewness and shapiro wilk test showed that non-lonely participants deviate from the normal distribution since the value is significant at .05. A non-parametric Mann Whitney U was conducted and found that non-lonely (Mean rank = 7.23) and lonely (Mean rank = 24.50) participants did not differ significantly ($U = 76.50$, $p = .078$) on levels of social media addiction. Therefore, the null hypothesis can be accepted.

Hypothesis 5 stated that there would be a significant relationship between loneliness and levels of social media addiction. Preliminary analysis showed a monotonic relationship via a visual inspection of a scatterplot. A pearson's correlation coefficient showed that there was a moderate positive relationship between loneliness and levels of social media addiction ($R (82) = .305$, $p .005$). This relationship can account for 9.3 % of variation of scores. Therefore, the null hypothesis can be rejected.

Hypothesis 6 states that there will be a significant relationship between age and levels of loneliness. Preliminary analysis showed that there was a monotonic relationship via visual inspection of a scatterplot. A spearman's rank order correlation coefficient showed a weak negative correlation between age and loneliness levels $R_s(86) = -.265$, $p = .013$. therefore, the null hypothesis can be rejected. This relationship accounts for 7% of the variation of scores.

Hypothesis 7 states that there will be a significant relationship between age and levels of social media addiction. Preliminary analysis showed a monotonic relationship per visual inspection of a scatterplot. A spearman's rank order correlation coefficient found a moderate negative correlation between age and social media addiction levels $R_s(91) = -.315$, $p = .002$. Thus, the null hypothesis can be rejected. This relationship accounts for 9.9% of the variation of scores.

4.0 Discussion

The aim of this research was to investigate the relationship between attachment qualities, gender, age, loneliness and social media addiction. It was hypothesised that there would be a significant relationship between attachment qualities and loneliness levels. It was also hypothesised that there would be a significant relationship between attachment qualities and social media addiction. Furthermore, it was hypothesised that there would be a significant difference in gender and social media addiction. Moreover, it was hypothesised that there would be a significant difference between lonely versus non-lonely individuals and their levels of social media addiction. In addition, it was hypothesised that there would be a significant relationship between loneliness and social media addiction. It was also hypothesised that there would be a significant relationship between age and loneliness levels. Finally, it was hypothesised that there would be a significant relationship between age and social media addiction.

Hypothesis one found there was a significant relationship between attachment styles and loneliness levels. Avoidant attachment style showed a weak positive correlation with loneliness levels. Ambivalence-worry showed a moderate positive relationship in relation to loneliness. Furthermore, ambivalence-merger showed a strong positive correlation in relation to loneliness and secure attachment styles showed no relationship with loneliness levels. This would be in support of the findings that Erozkán (2011) found in a study which looked at attachment styles and loneliness levels. The findings show that secure attachment styles are less likely to be lonely (Erozkán, 2011). Individuals that are secure attachment types have more positive

interpersonal relationships as their inner working model would be based on their early relationship with their caregiver (Bowlby, 1969). Moreover, securely attached individuals have more positive feelings of themselves and others. Whereas, insecure attachment styles have more negative feelings about oneself and others (Erozkan, 2011). Ambivalence-worry individuals fear abandonment and ambivalence-merger feel others do not want them (Carver, 1997). Therefore, insecure individuals could be lonelier since they may not feel connected to others.

Hypothesis two found there was a significant relationship between attachment styles and social media addiction. There was a weak positive correlation between avoidant attachment qualities and social media addiction levels. Also, there was a weak positive correlation between ambivalence-worry and social media addiction. Ambivalence-merger showed a moderate positive relationship and secure attachment style had no significant relationship with social media addiction levels. These findings are consistent with previous research (Monacis, Palo & Griffiths, 2017; Hart et al., 2015; Oldmeadow et al., 2013). Anxious attachment types had a positive relationship with social media addiction (Hart et al., 2015; Oldmeadow et al., 2013). This finding might be accounted for since anxiously attached individuals have a huge need to belong and feel accepted. Therefore, anxiously attached may seek this through social media and if they experience positive interactions this may further reinforce using social media to belong. Furthermore, Hart et al., (2015) showed avoidant attachment styles restrained activities to do with social media because they are less concerned with meeting people. This may be explained from the aspect of social media offering anxious attachment styles the space they need to avoid becoming close to others (Monacis et al., 2017). Although, previous literature (e.g. Monacis et al., 2017; Oldmeadow et al., 2013; Hart et al., 2015) has used the experience in close relationship to measure attachment compared to this study using the measurement of

attachment qualities. It still shows that the results are similar in relation previous literature on attachment and social media addiction.

Hypothesis three found there was a significant difference between gender on levels of social media addiction. It was found that women scored significantly higher than men on social media addiction. The current findings support previous literatures findings (Andreassen, Pallesen & Griffiths, 2017; Griffiths, Kuss & Demetrovics, 2014; Andreassen, 2015). However, Zhou and Leung (2012) found males tended to be more addicted to social networking site games. Furthermore, Cam and Isbulan (2012) found males were more addicted to facebook than females. Although previous literature shows conflicting results the current findings add to the literature that females tend to be more likely to be addicted to social media (Perrin, 2015).

Hypothesis four found that there was no significant difference found between lonely and non-lonely individuals and their levels of social media addiction. This supports the current finding that Ranaei et al., (2015) found in their research. Previous literature has found that loneliness has a significant relationship with social media addiction (e.g. Ozdemir, Kuzucu & Ak, 2014; Zhou & Leung, 2012). According to Ozdemir, Kuzucu and Ak (2014) loneliness is a stronger predictor of potentially becoming addicted to social media compared to depression. Munoz-Rivas et al., (2010) also found that there were significant differences in individuals using the internet to decrease their feelings of loneliness. Although, this study found no difference between lonely and non-lonely individuals in social media addiction this could have been due to numbers of the bottom 25% scores and the top 25% scores as the mean score of loneliness in the current study was mid-range. Therefore, this could have played a part in why there was no significant difference found.

Hypothesis five found that there was a significant moderate positive correlation between loneliness levels and social media addiction. The current finding supports previous literature in their findings (Ozdemir, Kuzucu & Ak, 2014; Zhou & Leung, 2012; Munoz-Rivas et., 2010). Loneliness is when one feels their social needs are not being met and they feel socially isolated from others (Hawkley & Cacioppo, 2010). This finding could be accounted for because the risk of internet addiction may increase if individuals use the internet as a means of escape. Furthermore, individuals may feel to cope with feelings of sadness or loneliness that the internet helps. Also, individuals that feel lonely may turn to the internet for human interaction and to feel connected to others. Moreover, it is important to note that levels of social media addiction and loneliness levels were both mid-range in average scores.

Hypothesis six discovered a significant moderate negative correlation between age and levels of loneliness. The current finding does not support previous literature on age and levels of loneliness (Luhmann & Hawkley, 2016; Tumkaya, Aybek & Celik, 2008). The previous literature found that as age increased so does loneliness levels (Luhmann & Hawkley, 2016). Tumkaya, Aybek and Celik (2008) states that loneliness levels and age may be accounted for in their results as increasing loneliness could be due to an increase in life stressors since they were students and it was near their graduation. Furthermore, the pressure of finding a job and being successful in exams may contribute to the loneliness levels. Similar, the current findings in this study may be because as one gets older they are more settled in life and possibly have a spouse and partner. This current study is different because other studies have been purely done on university students and this study sampled outside of university.

Hypothesis seven found that there was a moderate negative correlation between age and levels of social media addiction. In other words, as age increased levels of social media addiction decreased. This finding would support previous literature carried out by McAndrew and Jeong (2012). McAndrew and Jeong (2012) did not look at social media addiction but looked at the amount of time spent on facebook. This current study is different because it is looking at general social media addiction and not the amount of time spent on facebook.

Strengths

A significant strength of this current study is that it addresses a gap in the literature, in regards to attachment styles, loneliness, gender, age and social media addiction. Previous research has investigated attachment styles and social media addiction by using the relationship questionnaire (Eroglu, 2015) and the experiences in close relationships questionnaire (Hart et al., 2015; Oldmeadow et al., 2013). Whereas, the current study has used the measurement of attachment qualities (Carver, 1997). The current study also recruited participants outside of universities as previous literature primarily used university students (e.g. Eroglu, 2015; Monacis, Palo & Griffiths, 2017). Another strength of the study is that the measures used have shown good internal reliability in previous studies (Carver, 1997; Russell, Peplau & Ferguson, 1978; Andreassen et al., 2016). The Cronbach's alpha level for the UCLA scale showed high internal reliability at .96 and .85 for the BSMAS measurement. Furthermore, the range of ages was spread out among different age groups compared to previous literature on age, loneliness and addiction levels (e.g. Zhou & Leung, 2012; Tumkaya, Aybek & Celik, 2008).

Limitations

Limitations include that the Cronbach's alpha for two attachment types were below satisfactory levels. Secure attachment style had a Cronbach's alpha of .66 and ambivalence-merger was .68. Furthermore, the sample size could have been larger. Small sample sizes do not allow for generalisations. Moreover, the study was self-report which means accuracy cannot be guaranteed. The study also was correlational so it cannot predict causations. Also, because the questionnaires were not presented in three randomised orders means that potential order effects were not controlled for. Finally, because potential order effects were not controlled for this could have affected why so many of the UCLA loneliness questionnaire went unanswered as it was always last.

Future research

Future research should seek to obtain larger samples in non-university students to allow for generalisation of results. Furthermore, cross cultural comparisons should be investigated as previous conflicting findings could be due to the research being carried out in different cultures. For instance, Kirik, Arslan, Cetinkaya and Gul (2015) carried out research in turkey and found a significant positive relationship with age and social media addiction. Whereas, Jafarkarimi, Sim, Saadatdoost and Hee (2016) found no significant difference in gender, age and social media addiction amongst Malaysian students.

Further research could explore gender differences further and the different types of online activities to see if certain activities are more problematic for males and females. Also, future studies could investigate the different consequences that occur due to addiction to social media as this could help in providing clinical evidence. However, this would need to be done not as

self-report surveys but as clinical interviews or case studies. Research needs to be focused on trying to apply it clinically to get more funding or help for people with social media addiction.

Future implications and applications

The current study showed significant results across six of the seven hypotheses which shows that further research needs to be done. If the study is replicated and finds similar results then this could help with several practical applications. The current findings could help inform caregivers of the importance of early attachments and the effect they have in later life (Bowlby, 1969). Furthermore, classes could teach caregivers on how secure attachment styles can be developed amongst them and the child. Insecure attachment styles also have a relationship with loneliness levels. The more insecure the individual is the higher their loneliness levels. Questionnaires which measure attachment styles could also look out for the possibility of loneliness. Moreover, this could help put supports in for people that are insecurely attached and possibly in future research find possible protective factors for not developing significant loneliness where it impacts the individual's life. Also, because loneliness is related to social media addiction this could further impact individuals in their personal and professional lives. So therefore, more clinical research needs to be put in place to explore loneliness and social media addiction, so that supports can be put in place for individuals.

Conclusion

The current study has found that there was a significant relationship between attachment styles and loneliness levels. Secondly it found there was also a significant relationship between attachment styles and social media addictions. There was no significant relationship found between securely attached individuals on loneliness levels and social media addiction. Thirdly,

there was a significant difference between gender and social media addiction. Results showed females scored significantly higher on social media addiction levels. Fourth, there was no significant difference between lonely and non-lonely individuals and social media addiction. Fifth, there was a significant relationship between loneliness and social media addiction. Sixth, age groups were significantly negatively correlated to loneliness levels. Finally, there was a significant negative correlation between age and social media addiction.

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Appendices

Appendix A

My name is Natasha Branagan and I am conducting research in the Department of Psychology that explores adult attachment patterns and loneliness in relation to social media use. This research is being conducted as part of my studies and will be submitted for examination and may also be published in the future.

You are invited to take part in this study and participation involves completing and returning the attached anonymous survey. While the survey asks some questions that might cause some minor negative feelings, it has been used widely in research. If any of the questions do raise difficult feelings for you, contact information for support services are included on the final page.

Participation is completely voluntary and so you are not obliged to take part.

Participation is anonymous and confidential. Thus, responses cannot be attributed to any one participant. For this reason, it will not be possible to withdraw from participation after the questionnaire has been collected.

The questionnaires will be securely stored and data from the questionnaires will be transferred from the paper record to electronic format and stored on a password protected computer.

It is important that you understand that by completing and submitting the questionnaire that you are consenting to participate in the study and that you are over the age of 18.

Should you require any further information about the research, please contact Natasha Branagan [REDACTED]@mydbs.ie . My supervisor can be contacted at

Thank you for taking the time to complete this survey.

I consent to participate in this survey

Appendix B

What gender are you ?

A = female

B = male

How old are you?

1 = 18-24

2 = 25-34

3 = 35-44

4 = 45-54

5 = 55-64

6 = 65-74

7 = 75+

Appendix C

Bergin Social Media Addiction Scale

Instructions: Below you will find some questions about your relationship to and use of social media (Facebook, Twitter, Instagram etc).

Choose the response option for each question that best describes you.

How often during the last year have you...

	Very Rarely	Rarely	Sometimes	Often	Very Often
..spent a lot of time thinking about social media or planned use of social media?	<input type="checkbox"/>				
..felt an urge to use social media more and more?	<input type="checkbox"/>				
..used social media in order to forget about personal problems?	<input type="checkbox"/>				
..tried to cut down on the use of social media without success?	<input type="checkbox"/>				
..become restless or troubled if you have been prohibited from using social media?	<input type="checkbox"/>				
..used social media so much that it has had a negative impact on your job/studies?	<input type="checkbox"/>				

Scoring for the questionnaire is

1= very rarely, 2=rarely, 3= sometimes, 4= often, 5= very often. The higher the total the more addicted the person is to social media.

Appendix D

MAQ

Respond to each of the following statements by expressing how much you agree with it (if you do generally agree) or how much you disagree with it (if you generally disagree). Make all your responses on the answer sheet only. Do not leave any items blank. Please be as accurate as you can be throughout, and try especially hard not to let your answer to any one item influence your answer to any other item. Treat each one as though it is completely unrelated to the others. There are no right or wrong answers, you are simply to express your own personal feelings and opinions. Choose from these response options:

- 1 = I disagree with the statement a lot
- 2 = I disagree with the statement a little
- 3 = I agree with the statement a little
- 4 = I agree with the statement a lot

1. When I'm close to someone, it gives me a sense of comfort about life in general.
2. I often worry that my partner doesn't really love me.
3. I have trouble getting others to be as close as I want them to be.
4. I find it easy to be close to others.
5. I often worry my partner will not want to stay with me.
6. Others want me to be more intimate than I feel comfortable being.
7. It feels relaxing and good to be close to someone.
8. I am very comfortable being close to others.
9. I don't worry about others abandoning me.
10. My desire to merge sometimes scares people away.
11. I prefer not to be too close to others.
12. I find others are reluctant to get as close as I would like.
13. I get uncomfortable when someone wants to be very close.
14. Being close to someone gives me a source of strength for other activities.

Items 4, 8, and 9 are reverse coded.

Security = Items 1, 7, and 14.

Avoidance = Items 4, 6, 8, 11, and 13.

Ambivalence-worry = Items 2, 5, and 9.

Ambivalence-merger = Items 3, 10, and 12

Appendix E

INSTRUCTIONS: Indicate how often each of the statements below is descriptive of you.

UCLA loneliness scale (Russell, Peplau, & Ferguson, 1978)

Indicate how often each of the statements below is descriptive of you.

1) I am unhappy doing so many things alone.

Answer 1 = I often feel this way

Answer 2 = I sometimes feel this way

Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

2) I have nobody to talk to.

Answer 1 = I often feel this way

Answer 2 = I sometimes feel this way

Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

3) I cannot tolerate being so alone

Answer 1 = I often feel this way

Answer 2 = I sometimes feel this way

Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

4) I lack companionship

Answer 1 = I often feel this way

Answer 2 = I sometimes feel this way

Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

5) I feel as if nobody really understands me

Answer 1 = I often feel this way

Answer 2 = I sometimes feel this way

Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

6) I find myself waiting for people to call, or write.

Answer 1 = I often feel this way

Answer 2 = I sometimes feel this way

Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

7) There is no one I can turn to

Answer 1 = I often feel this way

Answer 2 = I sometimes feel this way

Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

8) I am no longer close to anyone

Answer 1 = I often feel this way
Answer 2 = I sometimes feel this way
Answer 3 = I rarely feel this way
Answer 4 = I never feel this way

9) My interests and ideas are not shared by those around me

Answer 1 = I often feel this way
Answer 2 = I sometimes feel this way
Answer 3 = I rarely feel this way
Answer 4 = I never feel this way

10) I feel left out

Answer 1 = I often feel this way
Answer 2 = I sometimes feel this way
Answer 3 = I rarely feel this way
Answer 4 = I never feel this way

11) I feel completely alone

Answer 1 = I often feel this way
Answer 2 = I sometimes feel this way
Answer 3 = I rarely feel this way
Answer 4 = I never feel this way

12) I am unable to reach out and communicate with those around me

Answer 1 = I often feel this way
Answer 2 = I sometimes feel this way
Answer 3 = I rarely feel this way
Answer 4 = I never feel this way

13) My social relationships are superficial

Answer 1 = I often feel this way
Answer 2 = I sometimes feel this way
Answer 3 = I rarely feel this way
Answer 4 = I never feel this way

14) I feel starved for company

Answer 1 = I often feel this way
Answer 2 = I sometimes feel this way
Answer 3 = I rarely feel this way
Answer 4 = I never feel this way

15) No one really knows me well

Answer 1 = I often feel this way
Answer 2 = I sometimes feel this way
Answer 3 = I rarely feel this way
Answer 4 = I never feel this way

16) I feel isolated from others

Answer 1 = I often feel this way
Answer 2 = I sometimes feel this way
Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

17) I am unhappy being so withdrawn

Answer 1 = I often feel this way

Answer 2 = I sometimes feel this way

Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

18) It is difficult for me to make friends

Answer 1 = I often feel this way

Answer 2 = I sometimes feel this way

Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

19) I feel shut out and excluded by others.

Answer 1 = I often feel this way

Answer 2 = I sometimes feel this way

Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

20) People are around me but not with me

Answer 1 = I often feel this way

Answer 2 = I sometimes feel this way

Answer 3 = I rarely feel this way

Answer 4 = I never feel this way

Scoring:

Make all Oftens =3, all Sometimes =2, all Rarely =1, and all Nevers = 0. Keep scoring

Appendix F

Thank you for taking the time to complete this study. If you have any further questions regarding the study you can contact me through my email [REDACTED]@mydbs.ie

If any of the questions or statements made you feel uncomfortable or if you are experiencing any negative consequences from the survey please see below help-lines and websites that can help.

Alone

Website: www.alone.ie

Telephone: 01 679 1032

Email: hello@alone.ie

Samaritans

Website: www.samaritans.org

Telephone: 116 123

Email: jo@samaritans.ie

Mental Health Ireland

Website: www.mentalhealthireland.ie

Telephone: 01 284 1166

Email: info@mentalhealthireland.ie

Turn2me

Website: www.turn2me.org