

**What's Your Snapchat? I'll Be Watching You**

By  
Erin E. Miller

A Thesis Submitted to  
Saint Mary's University, Halifax, Nova Scotia  
in Partial Fulfillment of the Requirements for  
the Degree of Bachelor of Arts, Honours Criminology

April 2020, Halifax, Nova Scotia

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Approved: Dr. Rachael E. Collins

Assistant Professor

Date: April 10, 2020

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### Abstract

*Introduction:* Social media is an ever-changing human interaction, especially when it comes to relationships and break-ups. The main objective of this research study was to understand if social media was causing negative affects in its users and if it was causing people to engage in behaviours similar to stalking through normalization of following behaviours promoted by social networking sites and social learning.

*Methods:* To test this hypothesis, a sample of 101 Saint Mary's University students took part in an online survey that contained scales such as the DASS 21, The Diane Poole Attachment Scale and a number of other questions designed to understand participant demographics and social media usage.

*Results:* The results of this study found that students were not engaging in following and/or stalking-type behaviours post break-up, thus the hypothesis was not supported. The results did show that 70% of participants ranked in the moderate range on the DASS and that they have both secure/anxious-ambivalent styles of attachment.

*Conclusion:* This thesis ends with a discussion of possible reasons for such results. Limitations of this study were the sample only including individuals of the ages of 19-31 and that the sample only included students at a single university. The future direction of this study could include conducting the same survey in five years to see if the results may shifted.

April 10, 2020

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Sincerely,

Erin

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### **What's Your Snapchat? I'll Be Watching You**

Stalking is a term you may have heard before, but what does it really mean? Stalking is a crime involving acts of pursuit of an individual over time that is threatening or potentially dangerous (Meloy, J., 1998, p.1). While several definitions of stalking persist in this country, there remains a common theme: It is an unwanted predatory behaviour that causes the victim to fear for their safety. It may seem impossible to imagine ourselves in the shoes of a stalker, being infatuated with someone and following their every move. That said, if we think about it in a different context it may not seem so crazy. In this day and age, most individuals carry a cellphone, in the end of 2013 it was estimated that there were seven billion cellphone users world-wide (Ozcan, A., 2014). It is a convenient tool that can be used to stay in contact with friends and loved ones because we are always able to check in. Whether it be through text, calls, snapchats, messages, tracking devices or likes, we can always let someone know we are there. Social media and the constant contact it allowed has changed the way in which people connect, especially when it comes to dating and breaking up. The important question I have to ask is; has it changed users behaviour in a negative way? Now that we can always be connected to our special someone, what happens when that relationship ends? Are people constantly checking a person's location?, Snapchat stories?, Snapmap locations because we were in the habit of doing these things for so long? The purpose of this honours thesis is to discover if social media could be creating a new social landscape that is leading to unhealthy forms of attachment behaviours post break-up. Is it possible a new form of stalking is being created? In order to understand the above question, I will be applying the four sub-processes of Bandura's social learning theory after conducting a questionnaire to students at Saint Mary's University. This honours thesis will review the literature on the topics of stalking, social media, and attachment.

The research question that has guided this research is: Using Bandura's social learning theory, I will be looking at what the impact of social media is on post breakup relationship disengagement. I am investigating what role, if any, social media can play in forming unhealthy attachment behaviors and if the "constant contact" that social media permits is creating unhealthy behaviors for young adults who use the platform.

Social media is a part of daily life for many students. People update their Facebook, Twitter, Instagram and Snapchat daily, sometimes multiple times a day. This has led to a shift in how individuals interact with each other. They may not see a friend face-to-face anymore, but at the click of a button they are able to see their exact location and who they are with. Research has shown that young adults are now more isolated than ever as a result of social media, for instance, a correlation between social media usage and perceived social isolation was found in individuals ages 19-32 (Primack, Shensa, Sidani, Whaite, Lin, Rosen, Coldits, Radovic, and Miller, 2017). Primack et al., (2017) found that the more an individual is engaged with social media, the greater the perceived social isolation will be.

Adding to the problem of isolation, many young people view their worth based off the fantasy world of social media, often basing their social status on "likes," following and retweeting as measures of personal validation. Social media is where people post the highlight reel of their life and appear to be flawless. Things like exotic vacations, body transformations, and relationship milestones flood social media profiles. I am wondering if this fantasy world may be taking a toll on young adults' self-esteem and creating more insecurity. As a result, social media is an outlet that may be causing more harm than good for a number of different reasons. Primack et al., (2017), found social media causes users to have higher levels of anxiety and depression. One of the reasons for this, is that social media users are inundated with stereotypical visions of the best bodies, best



faces, fanciest cars, “perfect” relationships – it has become ‘the perfect life or the perfect lie.’ I am seeking to find if this combination of factors may be leading to unhealthy attachment issues after a breakup. If the participants in the study do exhibit unhealthy forms of attachment, depression, anxiety and stress, I want to understand how these things may influence the way in which they engage with social media. I will be looking at unhealthy forms of attachment such as stalking and if the age of social isolation may be contributing to this.

In order to understand what effect social media has on dating, a questionnaire was designed. The participants were Saint Mary’s University students ranging in ages from 18 to 30 and at all levels of schooling (1<sup>st</sup> year, 2<sup>nd</sup> year, 3<sup>rd</sup> year, 4<sup>th</sup> year, honours students, MA students, PhD students). To recruit participants for this study I designed posters to display around the university. In addition to the posters, I designed an email that will be distributed to all students in the Department of Criminology. I also requesting that professors from the Department of Criminology at Saint Mary’s University notify their students of this study, and possibly offer a bonus point to the students if they take the time to complete the questionnaire.

To collect the data for this study I used an online questionnaire through Qualtrics. The questionnaire had several scales, the first scale used was the Diane Poole attachment scale (DPAS). This scale has 31 questions that used a 3-point likert scale. The second scale was the DASS (Depression Anxiety Stress Scale) 21. In addition to these two scales, I included 39 questions that I composed to understand variables such as participant demographics, the participant’s social media usage, and insecurity in intimate relationships.

## **1. LITERATURE REVIEW**

The literature review will outline the relevant literature surrounding stalking, attachment and social media usage. This section starts by discussing laws around stalking in Canada and how

this correlates to the research study at hand. The next section will introduce social media by giving a brief history of the emergence and popularization of social networking sites and portable devices over the past 20 years. This section will then go on to explain how social media is perpetuating stalking behaviours and discuss problems social media creates. The next section of the literature will explain attachment and how this is relevant to the current study. Finally, this section ends with a discussion on attachment and stalking.

### **1.1 Stalking Laws in Canada:**

Stalking is recognised in the Criminal Code of Canada under section 264 (1) labelled as Criminal Harassment. Section 264 (1) of the Criminal Code defines "Criminal Harassment" as repeated conduct that persists over a period of time that causes the victim to fear for their safety in a reasonable manner and the outcome of the harassment does not need to be a physical injury. Section 264 of the Canadian Criminal Code was not introduced until 1993, up until that point the act of stalking was charged under different offences like mischief or harassing phone calls. Over time, this law has been amended multiple times to better encapsulate different forms of stalking. While the Criminal Code of Canada addresses cyberstalking, there are no direct laws regarding it. The Criminal Code lists other sections that the act of cyberstalking could be considered under. This may be due to the fact that it is difficult to decipher what is cyberstalking and what is considered normalized online behaviour.

An important idea to note is that the purpose of this research study is not to prove that consistently following someone online should be defined as criminal harassment. The purpose of this study is to understand how social networking sites are normalizing behaviours that are similar to that of stalkers and to understand how they may be influencing following behaviours after a breakup.

In order for the act of stalking to be illegal it must cause the victim to fear for their safety. Rozatkar and Gupta (2019) described cyberstalking “a repeated pursuit over the internet” (Pg. 2). Given how widely accessible the internet is now and the amount of social networking sites that are available, it gives the individual who is cyberstalking many different grounds from which they can gather information. They are able to check different platforms that they know the individual they follow uses. Rozatkar and Gupta (2019) also discuss how cyberstalking is different than that of physical stalking because of the anonymity it provides the individual who is stalking. This means that the victim may be completely unaware that they are being followed so closely. Due to the fact that they are unaware means that they are not fearful, this can not legally be classified as stalking or criminal harassment. While following someone’s online actions may not have them fear for their safety, it is important to note that this behaviour is in fact harmful to the individual who is constantly checking on others through social media. The purpose of this is to try to draw similarities between the behaviours of stalking and the behaviours that social media is promoting and perpetuating and explain how they are harmful.

## **1.2 The History of Social Media**

Before we delve into different the social media sites and how they are used, I will provide a brief explanation of the history and popularization of social media and mobile technology. An article by Lomborg (2017) outlined the emergence of many popular apps and social media sites throughout the past 20 years. It helps give us a good understanding of where the use of social media began and how it has evolved. This article starts by discussing the history of social media research and how in the early 2000’s blogs were extremely popular in use and also a popular research topic. Lomborg (2017) then goes on to discuss the mid to late 2000’s and how users transitioned from sites such as MySpace to the still very popular Facebook. Another milestone in

the popularization of social media was the release of Apple's first iPhone, which came out in 2007 (Lazonick, W., Mazzucato, M., & Tulum (2013). By 2010 Lomborg (2017) discusses how mobile social media sites were starting to gain popularity. Sites such as Twitter, Instagram, and snapchat. Another important milestone occurred in 2012, which was the usage of smartphone applications or "apps". Due to the fact that cellphones were becoming more advanced, more companies started to create apps. In 2012 app usage on tablets and cellphones surpassed browser usage (Enis. 2013). Smartphones and apps allowed its user to access the internet from any location, making it much more convenient then accessing the internet from a desktop/stationary computer. In a sense, the world was literally at our fingertips. Since then we have only seen the continued usage of apps and mobile devices, like smartwatches. In this next section, I will discuss a number of different social media platforms. I will elaborate on how they function and how they are used.

### **1.3 Social Media and the Concept of Staying 'Socially Connected' in a Non-social Atmosphere**

A popular app that can be used to connect with friends is 'Find my friends'. This app created by Apple Inc. in 2011 (Wikipedia, 2020). This app allows the user to easily locate their friends or family by using any Apple iPhone, iPad, or iPod Touch. On 'Find my friends' you are able to share your location and anyone who has shared their location with you is visible on your phone. Not only are you able to view their location but you are able to get the exact direction if you wish to follow them to their location. Whenever the device connects to data or Wi-Fi the app will update your current location. You are able to see how long a user has been in a certain location, when they leave that location, and how long ago they left. This app has an option where you can set up a notification that alerts you when one of your friends has arrived at a certain

destination. You are also able to set up a notification that will alert you when they leave their current location.

Snapchat is an app great for taking humorous photos, connecting with friends, and capturing memories. This app was created in 2011 by Evan Spiegel, Bobby Murphy, and Reggie Brown (Molloy, 2017). These photos can have a timer set so they appear for 1-10 seconds or with no time limit. You can send the photos or videos to either one or one hundred of your closest friends. Snapchat has lots of different effects that you can add to your photos. These effects include masks, stickers, time stamps, location stamp, or gifs (moving images). The purpose of these effects is to allow the user to design and edit pictures, often in funny or emotion provoking ways. An example of this would be putting a sticker that says “Yummy!” or a gif of an excited person on a picture you took of the ice cream sundae you ordered to convey to your friends that you are excited to eat the sundae. Snapchat also has a section that is called “Snap Map”. Snap Map allows the user to display their exact location if they choose. Users are able to create avatars called a “Bitmoji”. This avatar is then displayed on the Snap Map at the user’s current location. Whenever the user switches location and connects to data or Wi-Fi the Snap Map is updated. Snapchat has a feature that is called “My Story” allowing you to post a video or photo that all your friends/followers are able to see. These stories last for 24 hours and your followers are able to view it as many times as they wish. This feature allows you to see who has viewed your story and if anyone has taken a screenshot of it. You are also able to tag your friends in your story, and they are able to tag you in their story. If you are tagged in their story, any of their friends or followers will be able to add you as a friend and send you messages. Snapchat syncs all phone numbers you add into your cellphone and you are able to see

people who also have snapchat, they are then able to add you as their friend. Snapchat has a score counter; this tells you how frequently people use the app.

Instagram is an online application that you can use on both cellphones and computers. This app was released in October of 2010 and was created by Kevin Systrom and Mike Krieger (Eudaimonia, 2017). You are able to create a profile, capturing and sharing your life in whatever way you want. You can follow friends, family, and celebrities. You are able to post pictures with friends and tag them so that your photo will show up on their profile. Instagram has the option to either have a public or private account. If the account is public, anyone is able to view your posts and any posts you have been tagged in. If your account is private, only people you approve are able to see your posts. Instagram allows you to see who follows who. Instagram also has a section referred to as “direct message” where you are able to privately send messages, photos and posts to anyone you are connected with. Instagram has a component that is referred to as “Your Story”. You are able to post photos or videos for all your followers to see. You can add time stamps, location stamps, stickers and gifs to your stories. These stories stay up for 24 hours but if you want to make them permanent to your profile you can add them to your ‘Highlights; This is a folder section located on your profile. Instagram used to have a feature where you were able to view what photo’s people liked, what posts they commented on and who they followed. This feature was taken away in October 2019. Victor Shah (Instagram’s head of production) said that “simplicity was the driving factor” and that the feature wasn’t being used very much (Saad, 2019). Another reason was that user often had no idea if their activity was showing up or not and many users did not want their activity visible to other users (Saad, 2019). According to various sources, this feature was removed because it was not being used very much. Along with the activity monitor being removed from the platform, the visible number of likes per post was

removed for everyone to see so only the individual who made the post was able to see how many people liked it. According to Bloomberg.com, the creators of Instagram removed the number of likes to reduce the competitiveness on the platform. A quote from Adam Mosseri (Instagram CEO) stated “The idea is to try and reduce anxiety and social comparisons, specifically with an eye towards young people.” (Wagner, 2019). As we can see, Instagram began to have many negative effects on its users.

While this is only a small sampling of what social media platform are out there, one thing we are able to see with all these platforms is that they are promoting staying constantly updated with friends, family, celebrities and significant others. The online landscape of social media has changed the way in which humans connect. I believe this may be in a non-malicious and unintentional way promoting behaviours similar to that of stalking, especially when a breakup occurs.

#### **1.4 Commodification of Social Media**

Social media is not only used to stay connected with friends and family, but it has now transitioned into being a platform for celebrities and social media influencers to gain popularity and promote their brands. Influencers are encouraging their followers to check in everyday and view their posts on all of their social media accounts. What these social media influencers do is referred to as “self-branding”, this means that the individual creates an image that they create revenue from (Khamis, Ang, & welling, 2016). These influencers and celebrities may post dozens of times a day for their followers. People are not only being conditioned with the constant contact of their personal relationships, but also with celebrities. It is now normal to wake up every day and check what people are doing on various social media accounts. However, just because this behaviour is normalized, does not mean it is healthy. We are allowed to watch the

lives of individuals who we do not actually know. This can create a false connection, leading the viewer to become emotionally attached to an individual who does not even know they exist. It is unhealthy to be so invested in the lives of people they do not know. Many individuals who are social media influencers have had numerous violations of privacy because people will figure out the location of the house and show up there asking for autographs and pictures.

This behaviour of checking on celebrities and influencers every day may be encouraging and normalizing cyberstalking. We see this in the degree that people follow these stars. People create social media accounts and YouTube channels discussing any action that celebrities make online. For example, people speculate if they are dating someone by their comments or likes on others photos, they stalk their every move in the online world. This unusual behaviour should not be considered normal, but in our society it has become normalized. As a result, a sense of entitlement to know what others are doing at all times (both celebrities and everyday people) has been created. This is contributing significantly to the normalization of constant contact in our society.

A study conducted by Fox, Nobles, and Akers (2010) discovered that the perpetration of stalking among college students is largely based off what is learned from and reinforced by one's peers. This appears understandable when young adults are being told to continuously check back on these influencer accounts and with their friends or significant others. These individuals may forget that social media is a business used to create revenue for these influencers. It is not a real connection they have with them. While social media is promoting following behaviours it also has extremely negative affects on its user as we can see documented in academic literature.



### 1.5 Social Media Addictions

Often times when the topic of addiction is discussed people tend to think about things that are substances, like alcohol or cigarettes. We do not always think about things that are not physical or physically consumed. Social media can be extremely addictive as discussed in much of the academic literature, it is classified as a behavioral addiction (Griffiths, 2005). This section will discuss social media addiction and the ways in which it can negatively impact the lives of its users both mentality and physically.

Longstreet & Brooks (2017) defined social media addiction as an internet addiction specifically associated with social networking sites. This type of addiction involves checking social media sites for notifications, updates, messages, the list goes on. The user may also be using social media as a way to present themselves and build relationships (Longstreet & Brooks, 2017). Social media plays a large roll in many college students lives. Most university and colleges have social media pages themselves that they promote to the students, and students use social media as a way to connect with new friends they meet on campus.

The consistent use of social media has negative effects both mentally and physically. It can have negative affects on things like physical activity, sleep quality and result in less face to face interactions as found in a study by Shensa, Escobar-Viera, Sidani, Bowman, Marshal, & Primack (2017). In this study 1749 participants between the ages of 19-32 were randomly selected to participant in an online survey to understand if problematic social media usage could play a part in depression levels. Problematic social media usage is defined as a disproportionate regard concerning social media and a strong desire to engage with it, so much so that the time spent using social media may negatively effect activities such as work, school, relationships, physical and mental health (Primack, B., Shensa, A., Escobar-Viera, C., Barrett, E., Sidani, J.,

Colditz, J., & James, A., 2017). The results of this study found that individuals who had problematic social media usage had a 95% increase in depressive symptoms. They also found that the more often social media was used the greater the chance of depressive symptoms.

### **1.6 Attachment**

In order to understand how people interact, and whether or not this interaction is healthy, we need to understand behaviour and attachment. This section will explain behaviour and how the experience regarding attachment in infancy and childhood drastically effect our lives, attachment forms and adult relationships. Kienlen (1998) defines attachment as a strong affectional bond with a specific person. The first attachment most people have in their life is when they are an infant and the attachment figure is their caregiver, usually a parent.

Bowlby (1982) discussed how originally it was believed that infants only developed attachments to their mother's because the mother fed them. Through the Harlow Macaque monkey experiment, it became evident that this is not always the case. Even animals need and long to have an affectional bond and that it is not only dependant on food (Bowlby, 1982). This was evident in the fact that baby Macaque monkeys preferred a soft warm surrogate mother that gave no food, as opposed to the hard and cold surrogate mother that did provide food (Bowlby, 1982). Watt (2015) stated an individual's attachment style is heavily dictated early in life by the relationship they have with their parents or caregivers. If a child is in distress and the care giver responds appropriately, then over time the child will learn how to regulate their emotional reactions (Watt, 2015). In healthy forms of attachment the caregiver provides comfort to the child and attends to them when they are in distress. An example of this would be if a child has a bad dream in the middle of the night, the caregiver and/or parent would come and comfort the child letting then know everything was alright and that they were safe. This is comforting to the

child and allows a healthy bond of trust to be formed. Over time, the child will construct a healthy and secure form of attachment within themselves and with others based off the appropriate and healthy responses given by the caregivers. The child will learn that they are able to trust the attachment figure when they are scared or sick or in need of protection (Bowlby, 1982). The attachment they learn as a child will then shape the attachment style the child has for their whole life (Watt, 2015). When in distress, receiving a comforting response the child needs from their caregiver a builds a trustworthy connection. As time goes on and if the relationship between the child and caregiver is maintained and strengthened, this helps to shape healthy forms of attachment.

In contrast, Watt (2015) also discusses how if a caregiver responds in a negative way to a child's signs of distress, this can breed unhealthy and negative attachment styles. Negative responses could vary from being negligent and unresponsive to the child's distress and/or rejecting the child. According to Watt (2015), this could mean the child will develop maladaptive forms of attachment with themselves and others and this can affect their attachment style for the rest of their life. For example, if the child is crying and upset, and the caregivers does not respond or responds by hitting the child, then this can form distrust and anxiety in the child.

Humans learn a great deal of things when they are children and the things they learn and experience can shape their behaviour for the rest of their life. As time goes on the attachment relationships can shift and change as the child grows older. When the child grows to become an adult, that attachment figure will normally shift to a romantic partner (Kienlen, 1998). This means that the distrust and anxiety the child learns when they are an infant can be carried through to adulthood and have a key part in shaping their adult relationships.

There are however many other things that can have negative impacts on an individual's form of attachment. A major factor of attachment is whether or not an individual has experienced any form of abuse as a child. This can be physical, mental, emotional, sexual abuse and/or neglect. Research has found that maltreatment in childhood experiences have a significant impact on things like behaviour, emotion, and attachment (Lowell et al., 2014). Based on these findings, it would appear that adults who had experienced maltreatment in childhood predicted negative emotional and behavioural outcomes (Lowell et al., 2014). This included internalizing and externalizing problems. A study by Finzi, Ram, Har-Even, Shnit, & Weizman, (2001) compared the attachment and aggression styles of neglected children, physically abused children and non-abused/non-neglected children. Their results found that the abused children had mainly avoidant attachment styles and higher levels of aggression than that of the neglected group and non-abused/non-neglected groups (Finzi et al., 2001).

The neglected group had mainly anxious/ambivalent attachment style and lower levels of aggression. Non-abused/non-neglected children (68.6%) had mostly secure attachment and low levels of aggression. Based off these findings it is clear that children who are the victims of violence and abuse as children have negatively impacted forms of attachment and higher levels of aggression.

While the attachment figure may shift as the individual grows, the aspects of maintaining attachment remain the same. When a baby cries, they want the attention of the caregiver, just as when adults interact with their romantic partner, they want a positive response. When a baby does not receive the attention they want from their caregiver this can lead to an intensified level of stress because that attachment is not being reinforced. Similar to an adult's romantic

relationship, if the individual does not receive a response they want from their partner this can lead to stress and anxiety (Watt, 2015).

This in part is why I am using the DASS in the questionnaire - part of the objective of this study is to understand if higher levels of social media usage lead to higher levels of stress, anxiety and depression in the participants. In the case of both infants and adults when their attachment figures are not responding, they may perceive their attachment to this individual as being threatened. Bowlby (1980) states that because the goal of attachment is to maintain a bond with the attachment figure, if there is anything that may threaten the bond then the individual may engage in actions that are more intense to try and maintain that connection.

When we look at attachment it is easy to see how there is a substantial correlation between an individual's attachment from when they were an infant and how they handle relationships as adults. Based off what we see in the literature, if an individual has attachment problems as a child then they will likely have attachment issues as an adult. Having attachment issues is a form of anxiety (Watt, 2015). The individual is in constant fear that their attachment figure may abandon them.

### **1.7 Different Forms/Styles of Attachment**

There are different forms/styles of adult attachment. Hazan and Shaver (1987) discussed the variation between adults who identify between avoidant, secure, and anxious-ambivalent. They specified that the distinguishing factors between these three attachment styles were based off the view the individual has of their own relationship, their view of themselves and their view of others (Guerrero, 1998). There are remarkable differences between how these three forms of attachment view these three things. Individuals who identify as 'secure' perceived themselves to be liked by others, they assumed others to be of good nature and they saw relationships as

“waxing and waning” (Guerrero, 1998). Anxious-ambivalent individuals describe themselves as having doubts about themselves, they are concerned that others do not care about them, they desire closer relationships and want love that is easy and with intense emotions (Guerrero, 1998). Avoidant individuals stated that they do well by themselves and that intimate relationships are fleeting and difficult to maintain (Guerrero, 1998). Guerrero (1998) discussed how these descriptions seem to mean that individuals with secure attachment styles have positive models of others and themselves, anxious-ambivalent individuals have negative models of themselves, and avoidant individuals have negative models of others.

It is clear from these descriptions that individuals who fall into different attachment styles understand themselves, others and their relationships very differently. This may also mean that the different attachment styles have more successful intimate relationship success than others. For example, individuals with insecure attachment worrying about maintaining a relationship may resort to things like extreme displays of emotion, pursuit behaviour and close proximity to keep a relationship alive (Ménard & Pincus, 2012). A study conducted by Hendrick & Hendrick (1989) was able to support this claim about the 3 types of attachment. In this study, Hendrick and Hendrick used a 5-point likert scale and had the participants fall into 1 of 6 categories. These categories corresponded with the 3 styles of attachment. Compared to other research conducted by Hazan and Shaver, their results were consistent. The results showed that individuals with secure attachment styles often have the most successful and positive relationships.

Feeney and Noller (1990) made the point that self-esteem must play a huge role in the type of attachment a person has. Based on the data above this would seem to make sense due to the fact that individuals who have positive/secure attachment view themselves in a positive light, whereas individuals with anxious/ambivalent attachment have negative self perceptions. In more

simple terms, individuals with positive/secure attachment have higher/good self esteem are more successful in relationships and individuals with anxious/ambivalent attachment have lower self esteem are less successful in relationships. Feeney and Noller (1990) wanted to test this hypothesis to see if it was true. The results of their study supported that different attachment styles had varying levels of self-esteem. As predicted, individuals who had high self esteem had secure attachment and they scored low on self-consciousness and anxiety. This means that the secure individuals would seem to be positive in their interactions and are generally positive.

As we can see from the study, individuals who have secure attachment generally have good self esteem are more successful in relationships. Based off Guerrero's (1998) work, we can also see that secure individuals who have positive self models of themselves tend to be less jealous, whereas individuals with negative self-models are more jealous and tend to feel more worry and suspicion. Overall, it appears that based of these research studies, individuals who have secure attachment styles are (1) more successful in relationships, (2) have positive self-models of themselves (3) have higher self-esteem, (4) are less jealous.

In support of the theories of attachment previously discussed, we will now look at the types of attachment styles that are exhibited in individuals who show stalking behaviours. A study conducted by Patton, Nobles, & Fox (2010) looked at the attachment style in college age students who had admitted to stalking in a self report survey. The results of this study found that the individuals who had stalked had significantly higher scores on insecure-anxious attachment.

Based off the literature, it leads me to believe there is a strong correlation between: (1) secure attachment, and (2) self-esteem. Based of the research of the negative effects that increased social media usage has on an individuals self-esteem, I am wondering if the increased use of social media has an affect on relationship attachment and if individuals who use social

media more have negative styles of attachment. This is largely in part why the Poole Attachment Scale was selected for this study.

### **1.8 Social Media and Attachment**

The way we use social media now has a huge effect on our attachment. Research from Hart, Nailling, Biezer & Collins (2015) found that individuals who interact more on Facebook (like, comment, post) normally have anxious attachment forms. From this research they gathered that because of the attachment anxiety they have, the individual will engage more on Facebook to generate a positive feedback from their peers. They believe this is due to the fact the individuals with anxious attachment have an increased need for positive feedback and need to feel connected. By using Facebook frequently, they were able to satiate those needs.

Hart et al. (2015) raised the point that the positive feeling the anxious individual feels when they receive feedback on Facebook may be short lived and once it is over it leaves the individual feeling "empty". Thus, this may create a compulsive/addictive habit which leads to them going online more and frequently using Facebook to fulfill their need for peer acceptance. They need to keep this pattern of positive feedback in order to be satisfied with themselves.

In support of this claim, another research study also found that individuals who had anxious attachment styles had problematic social media usage (Worsley, McIntyre, Bentall, & Corcoran, 2018). The authors also discovered that university students between the ages of 17-25 who had anxious attachment style and problematic social media usage had often been subjects of childhood maltreatment. Based off their data, they have reason to believe that individuals who encounter depressive symptomology may use social media as a way to deal with their distress. They made the note though that well it may appear this way, they cannot claim it to be true as correlation does not imply causation.



## **1.9 Stalking and Attachment**

People who engage in stalking behaviour might try to maintain attachment with their victims in any way possible. Watt (2015) makes an interesting point that stalkers are similar to toddlers when their caregiver is trying to leave; these individuals may actually intensify their behaviour. This could be anything from frequent texts, calls, or Snapchats. They might be experiencing great amounts of anxiety and will try to do anything they can to maintain that connection once they perceive it to be in danger or as compromised. Lewis, Fremouw, Ben, and Farr (1999) conducted a study to compare the attachment styles of stalker groups versus non-stalker groups. This study had a sample of 240 undergraduate psychology students complete a survey to gain information. The researchers used the Stalking Behaviour Checklist to identify stalkers in the sample. Along with the SBC, they also administered a number of attachment and personality scales. Of the 240 participants, 22 of them qualified as a stalker according to the check list. The results found that compared to the control group, the stalker group had significantly lower forms of positive attachment patterns and had difficulty forming and maintaining relationships (Lewis et al., 1999). Menard and Pincus (2012) discuss how research shows that stalkers tend to be men who experienced traumatic childhoods with harsh parental figures, as well as having insecure attachment. They also discussed that female stalkers also frequently had traumatic upbringing.

## **2. THEORETICAL FRAMEWORK**

Social learning theory was first developed by Albert Bandura in 1977. In Bandura's article titled social learning theory (1977), he explains how people learn new behaviors and why people behave the way they do. It was originally thought by many that people behave because of inner forces such as impulse and desire, not external forces like behaviors they had learned from

watching another human react in a situation. Many thought these behaviors were not consciously made. For example, if a person acted out of anger it was because of poor inner control or irritability and the reaction was a direct product of the situation at hand. It was not thought that reactions or behaviors could be a result from seeing how others may react in certain situations. Behavior was therefore seen as a one-way street with only internal factors contributing to it. Bandura (1977) believed this view of behavior may be largely based off other explanations in the scientific community, a chain reaction of sorts. More specifically, behavior was viewed like adding vinegar to baking soda, a chemical reaction that happens when one substance interacts with another. There is no prior involvement that needs to happen with these chemicals that influences the chemical reaction. Behavior was seen the same way. A man gets angry because he was hit; him being hit was the only thing that was thought to make him angry. Not that he may have been influenced by watching another man get hit before and they displayed anger, so he believes he should react in the same way.

Bandura did not believe that this was enough to explain the complexities of human behaviors. Learning theories began to shift from focusing on internal explanations to looking at how external factors may have a role in shaping human behaviors. Social learning theory developed mainly from observational learning, which can briefly be explained as a number of interrelated sub processes reinforced through positive and negative reinforcement.

However, Bandura's (1977) social learning theory looked at how humans can learn from seeing others react in certain situations and how this observation can influence their own behavior. For instance, when a child observes an actor on television clean the table after dinner and get a reward, the observing child may make the cognitive connection that if they clear the table after dinner in their home that they may also receive a reward. They have seen that this

action was rewarded in a positive way and therefore will want to replicate it for themselves, creating a behavioral pattern in the child. The idea behind social learning theory is that behavior is learned roughly through observation before it is performed (Bandura, 1977). If the observer sees another person who engages in a behavior that produces what they believe is a favorable outcome then they may learn/use this behavior for themselves. Bandura (1977) proposed that if the outcome of a situation is not favorable then it can create behavioral inhibitors and the observer will not engage in that behavior. When people learn through observation they make mental connections with each behavior they see. Some connections are positive so they will use the observed behavior for themselves. Some connections are negative so they will not replicate the observed behavior. In the future, when the learner approaches a situation that is similar to what he had previously observed, his reaction to the situation is thought to be largely based off of what he had previously saw and not based solely off of the direct situation and his own internal thoughts. By observing this behavior, the observer will have somewhat of an idea of how to behave when they come to a similar situation in their own life.

In his 1977 article “Social Learning Theory”, Bandura discussed how observational learning occurs over 4 different subprocesses. The subprocesses are: *attentional processes*, *retention processes*, *motoric reproduction processes* and *reinforcement and motivational processes* (pp.6-8). Each of these subprocesses will be discussed below.

***Attentional processes:*** In order for a change in behavior to occur, the observer must understand what the model is doing to learn the behavior. Just by exposing the observer to the model behavior does not mean that they will pick up on it. The observer is more likely to attend to the model behavior if the model has qualities that are interesting or of value to the observer. An example of this would be what we see on television. The people we see on television are able

to capture the attention of many for long periods of time so this can be very persuasive to the observer.

***Retention processes:*** This process argues that an observer cannot be influenced by a behavior he witnesses if he does not make a mental note of it. Therefore, a huge part of observational learning is the observer remembering what he has seen. This retention process involves two things: imaginal and verbal. When the learner is being exposed to the behavior he must be able to capture and store the observed behavior so that later he can retrieve the modelled images to use it for his own benefit. People will have a greater retention if they are not mentally preoccupied. For instance, a dance student will learn a routine better if they are paying direct attention to the teacher and not distracted.

Rehearsal is an important part of being able to remember learned behaviors. People who practice a behavior are better able to perform the observed activity and less likely to forget it over time if the modelled behavior is practiced by the learner.

***Motoric reproduction processes:*** Motoric reproduction is a type of behavioral reproduction. Thus, when the observer has seen the behavior and made all the appropriate mental connections, he can then reproduce the behavior for himself. Whether or not the reproduction of behavior is successful will depend on a variety of things; one of which is that the individual may not have the skills yet to perfectly replicate a behavior.

***Reinforcement and motivational processes:*** Once the behavior has been learned, retained, and rehearsed, it can now be performed. Whether or not a behavior is retained will depend on whether or not the outcome was positive or negative. This is the point that will determine if a behaviour will be performed again. If the performed behaviour receives a

favourable outcome, then the performer is being positively reinforced, and he is likely to perform this behaviour again.

## **2.1 Positive Response, Punishment, and Maintaining Behavior**

Another key point in Bandura's 1977 social learning theory is the process that maintains a learned behavior. According to Bandura (1977), one of the biggest factors in whether or not a behavior is learned will depend on the type of response experienced by the learner. When a behavior is performed and the outcome is not favorable to the performer, they may not perform that behavior again. A positive response is when a behavior or action has an outcome that is favorable to the performer. If the action results in a way the performer likes it is very likely the performer will engage in this behavior again. Going back to the example of the child clearing the table, if he clears the table and is given a reward, then that behavior is being positively reinforced and it is likely the child will engage in this behavior again. The child will make the mental connection that clearing the table leads to a reward. Negative response or punishment is when a behavior or action that has an outcome that is not favorable to the performer. When a behavior is performed and the outcome is not favorable it is likely the performer will not engage in this behavior again. With the example of the child clearing the table, if they clear the table and no one rewards this behavior in a way that is favorable to the child and the child does not receive a reward, it is likely the child will not clear the table again. They may make the mental connection that clearing the table only creates more work for them and does not lead to any reward.

One thing that is important to note is that different outcomes can be favorable to different people. Positive and negative responses and punishments is not the same across individuals. This

means that a favorable outcome is idiosyncratic. In the end, it is the *behavior* that plays a huge part in determining if the performer will engage in that *behavior* again.

## 2.2 Observational Learning & Social Media

Now that I have outlined Bandura's approach to social learning theory and how he views the functions of observational learning, I will connect the four sub processes of observational learning from Bandura's social learning theory with social media. The overarching reason for selecting Bandura's social learning theory to aid in studying social media usage and negative forms of attachments after a breakup was influenced by Bandura's discussion on observational learning. This research project will argue that social media can have an impact on people through observational learning (which will be discussed in detail below). In this sense, social media is used to create a false image of the "*perfect life*". It is the *norm* now for people to show their lives on social media, however one of the biggest problems is that it is a filtered story *not* an actual representation of an average life. Khamis, S., Ang, L., & Welling, R. (2017) referred to this false representation as "identity construction". It has been found in the past couple of years that social media can have a very toxic effect on people. For instance, Primack (2017) found that social media is leading to higher levels of depression and anxiety among users aged 19-32. Hawi and Samaha (2017) also conducted a study, finding that university students who scored high on social media usage had low levels of self-esteem and students who scored low on social media usage scored higher on levels of self-esteem. Based on these findings, it is possible that there could be a connection between social media and negative styles of attachment that are being created through observational learning by the users themselves. This idea will drive this thesis. In order to test this idea, this study will take Bandura's four subprocesses of observational learning to determine if they can explain negative dating behaviors post break-up such as stalking. The

research hypothesis is based off Bandura's social learning theory. This thesis believes that the impact of social media may have an effect on post breakup relationship disengagement.

Thus, the research study will seek to discover if this negative attachment behavior is in fact part of the learning process caused in part by using social media. The thought process behind the research question is as follows: due to the inherent layout of social media, people are constantly connected; you can access anyone's exact location at anytime from anywhere. This now seems to be a normalized learned behavior. The question remains; what will the result be if the couple breaks up? If this new behavior is continuously happening, then can Bandura's social learning theory help us to understand attachment in this new age of social media? Is it possible that stalking is now a socially learned and a somewhat acceptable behavior? And if this is the case, what negative personality traits are being brought out in its users?

In order to test this research question, a questionnaire has been designed using the DASS and the Poole attachment scale. The DASS is a 21-question scale that is used to gauge depression, anxiety and stress in the participant. Participants answer the questions and their answers will tell us about their levels on the three variables being tested. The Poole attachment scale is a 31-question scale that gauges a participant's type and level of attachment in relationships. It has the participant focus on one relationship they have or have had, and they base their answers off their behavior during that relationship. Based on the results of the questionnaires the study will explain the behavior using Bandura's social learning theory. Below, I have outlined how his theory connects to the research question and the research questionnaire.

***Attentional processes:*** As discussed in Bandura's attentional process, the observer must understand what the model is doing to learn the behavior. We can see how this relates to social media. Users of social media see other people posting pictures of themselves, their relationships,

their accomplishments and so forth. The learner sees that this behavior receives a positive response from others whether it takes the form of likes, follows, or comments of praise. As stated, an observer is more likely to attend to the modelled behavior if the model has qualities that are interesting or of value to the observer. Social media is used widely by a vast array of people. These people can be friends, family members, strangers you find interesting. Social media also has users that are some of the world's most famous celebrities. These people have disposable income, they are stereotypically aesthetically pleasing, and they have the communal notion of a "perfect life". Everyone wants to have a "perfect life". It is very human to seek social praise, higher income and increased happiness, just like what we see on social media. This, however, is where I argue that the problem begins. In this way, social media can be used to manipulate what people see. There is no such thing as a "perfect life". It is an outlet provided to us where we are able to create our own story, a false fabrication. When we see everyone around us and those in positions of power using social media, we observe the praise they receive. People forget that social media is a business, essentially designed to leave consumers wanting more and create a demand, leaving the average person often feeling inadequate as a result. As a result of all the "perfection" we see on social media, this starts to create more insecurity among its users. According to Hawi and Samaha (2017) people are becoming hyperaware of what they look like compared to what they see on social media. Users begin to pay attention to what they are seeing posted on social media and the process of observational learning for the purpose of this research begins.

***Retention processes:*** The retention process according to Bandura (1977) states that an observer cannot be influenced by a behavior they witness if they do not make a mental note of it. Bandura states that the observer must remember what they see. This can relate to social media in



a multitude of ways. First, when using social media, it is easy to see what posts gain the most likes and what does not. As a result, the observer will begin to connect the dots the more they use the social media platforms. They can begin to make mental connections and store what they have learned so they may use it in the future when they model the behavior for themselves. This task can be accomplished through observing what poses people do in photos, what the captions say, even what time of day photos get the most likes. They will see how the game of social media is played. Not only does the learner make mental notes of how to use social media, they make notes of how they should be living their lives. They are being influenced by what they see and they may not realize it. The observer sees that these people on social media who have these perfect lives may do certain things so the observer makes mental notes in order to replicate these things, or at least try to. They see that it is the norm to make posts about your relationship and that it is normal to look at your significant others location. Everyone else is doing it so it must be the norm...right?

***Motoric reproduction processes:*** This is when the observer has seen the behavior and made the mental connection, he then reproduces the behavior for himself. They take everything they have seen and learned and piece it together. If the learner has in the case of social media, this is when the observer becomes the performer. They take all the knowledge they have collected from seeing who posts what on social media platforms and how they interact with others and perform it for themselves. They will post pictures they know will get likes and begin to create their own perfect online life. They will post their perfect relationship, all their accomplishments, perfectly posed photos, etc. This perfect story line is created online showcasing dates and love. Since this is a false fabrication, things may not be as lovely as they appear. Social media does not show the

struggles of a relationship or the work and sacrifices that must be made. This is when it begins to get dangerous.

Due to the fact that social media has created this form of constant contact; we are being told and shown that we always need to be updated. People become obsessed with their significant others online actions. They are constantly wondering who they are following, what photos they are liking, where they are at and who they are with and because of social media they are able to find out. We begin to constantly wonder why a person might not be texting back? Thinking perhaps ... Am I not good enough? Are they cheating on me? Why are they at that location?

Social media has taken people's insecurity and magnified it for the world to see, and this is what I believe (in part) is causing unhealthy forms of attachment. Adding to this problem is that we as a society are learning, reinforcing and retaining this behavior through the use of social media itself. As a result, strain is being created and people are becoming compulsive in their online behaviors, especially when it comes to dating. People are craving the online *validation* from their relationship and significant others. The behavior of using social media to check on your significant other may be reinforced hundreds of times a day. This happens from looking at their profiles on different platforms, receiving constant texts and Snapchats. Depending on how long a couple is dating, this behavior might be reinforced hundreds of thousands of times.

***Reinforcement and motivational processes:*** Once the behavior has been learned and performed, the reaction it receives will greatly determine if it is performed again according to Bandura. The individual who uses social media may be hoping for a specific response from their engagement. Whether this takes the form of likes, comments or follows. If they do not receive the validation they seek, then they may not post that picture, do that pose, or post at that time again. In the context of dating, when an individual uses social media to interact with their

significant other and the significant other responds, this is positively reinforcing the behavior of social media contact. If their significant other does not respond, this can cause the individual to become anxious as they feel they may be losing that constant contact. When a couple breaks up, that constant contact is essentially broken. There are no longer texts, snapchats, likes or posts. One of the individuals may not be able to deal with this loss of learned connection. It is hypothesized that they will continue to check the profile of their ex, their location, and their online interactions in general - Constantly. Due to the fact that this constant contact was so consuming, and because the individual relied so heavily on this relationship as an important part of their identity, they may be unable to let the person go naturally. Due in part to past research that states social media has a negative effect on a person's self-esteem, the loss of learned contact might be too much for an individual to bare and they may obsessively wonder what their ex is doing, if they are seeing other people, or having a connection with someone else. This behavior (although I argue is not intentionally done out of malice), can lead not only to online stalking, but physical stalking of the former partner. They are dealing with a broken connection and a connection that is now tied to their social learning. As a result, they may start to send dozens of texts, Snapchats, likes, etc. They may make phone calls in excess. They may show up at the individuals work, house, or current location. Understandably so, the person who is being "stalked" may not enjoy this predatory behavior and may respond by telling their ex to leave them alone.

When we look at stalking through the lens of the 4 sub-processes of observational learning, we can start to see the connection of how stalking may now be a socially learned process in the landscape of social media. I will be applying this theory to my research in the hopes of finding a correlation.

### 3. METHODOLOGY

In this study, using Bandura's social learning theory I looked at what the impact of social media is on post breakup relationship disengagement. In order to answer the above research question I chose to use a questionnaire. A questionnaire is a very popular tool used for data collection across many fields of research, such as sociology, political science and criminology. The purpose of a questionnaire is to ask a set of predesigned questions to a group of participants in order to collect primary data on a given topic of interest. One of the greatest strengths behind choosing a questionnaire for research is that it can be administered in a multitude of ways and can take place in many different settings. They can be administered by mail, online, email, over the phone, or in person. One of the drawbacks of questionnaires is that in order to make the questionnaire work for the researcher the participants need to have basic literacy comprehension in order to be able to follow the questionnaire instructions and have to be able to understand what the questions are asking of them. There are many things that need to be considered when deciding what method of questionnaire delivery is right for the study at hand. The current study will use an online format.

#### 3.1 Strengths of Using Questionnaires

Online questionnaires have several strengths. First, they are very time efficient for both the researchers and participants. The participants do not need to attend a meeting or interview that could interrupt their schedule. They can complete it at any time they wish and in any setting that is comfortable to them. Second, researchers do not need to worry about questionnaire responses getting physically lost as the data is stored online for easy access. Third, it is able to be administered across a wide range of people in different parts of the world, different cultural groups, and different ages. This means you can increase the generalizability of your research

sample. Fourth, this method of questionnaire is low cost and uses minimal physical resources. For example, we do not need to purchase things like stamps or envelopes to mail out the questionnaires. It is also time effective for both the participants and for the administrators, as the questionnaire is easy to design. Fifth, a benefit of the online questionnaire is the participant will not be tempted to answer questions in a more prosocial way as they may if they were in the presence of the interviewer. This is referred to as the interviewer bias, a common concern when questionnaires are administered in person or over the phone (Bowling, 2005, p. 287). An online questionnaire is completely private for the participant when they are answering the questions. Research shows that the more anonymity there is for a survey the greater the accuracy in response for sensitive topics. When dealing with subject matter that is sensitive, using an online system has the best chance of accurate and higher reporting.

### **3.2 Weaknesses to Questionnaires**

While there are many benefits to an online questionnaire there are also weaknesses. First, one drawback of an online questionnaire is early termination. This is when the participant does not complete the questionnaire. This can occur for a number of reasons. First, the participant may become bored and choose to terminate the session. Second, they may experience cognitive strain as a result of the questionnaire and terminate the session. Third, the computer may malfunction and the participant may be unable to complete the questionnaire. An example is that the power could go out while the participant is completing the study, leaving them unable to complete the questionnaire or a glitch in the computer or any of the operating systems may occur resulting in lost or missing data.. Fourth, in order for an online questionnaire to be successful, all operating systems must be functioning properly. There is also a potential to have a breach of privacy. Despite having advanced computer protection software you can never completely

guarantee that the questionnaire data is secure. There are extremely advanced hacking systems that may be able to access data even while it is protected. Breaches of privacy can also occur in mundane ways such as not logging out of the data file and another individual accesses the same computer and can access the open data.

Based on the strengths and weaknesses listed above, I decided an online questionnaire was the best form of data collection for this research.

### **3.3 The Research Questionnaire**

For the current research project I have opted for the shorter DASS 21 scale as opposed to the DASS 42. This questionnaire will only take between 15 –20 minutes for participants to complete. There are always concerns with any form of data collection and there is always room for error and inconsistency. For the reasons mentioned above we have decided that an online questionnaire is the best form of data collection for this research.

#### *3.31 DASS- Depression Anxiety Stress Scale 21*

The DASS 21 is a 21-question scale that uses a 4-point number system to collect answers. This scale gathers data on the participant's levels of depression, anxiety and stress in the participant. Participants answer the questions and their answers will tell us about their levels on the three variables being tested. Please see Appendix XX for a copy of the DASS.

#### *3.32 Diane Poole attachment scale (DPAS)*

The Poole attachment scale is a 31-question scale that gauges participant's levels of attachment in relationships. It has the participant focus on one relationship (romantic or platonic) they have or have had. As the participants complete the questions they will base their answers off their behavior during that relationship. Please see Appendix A for a copy of the DPAS.

### 3.33 *Designed Questions*

In addition to having both the DPAS and the DASS 21, I designed 39 questions to incorporate into the questionnaire. Questions 1 through 3 gathered demographic information from the participants. These demographics were: *age, gender, and level of schooling*. Questions four through thirteen were designed to gauge the participant's social media usage. These questions discovered how many social media accounts participants typically had, how often they posted and why they used social media. Questions fourteen through thirty-nine were crafted to understand the participants levels of insecurity and if they may have unhealthy social media usage patterns. This section of the questionnaire was designed to understand who the participant is and understand how and why they use social media. The purpose was to assist me in understanding the correlations between negative attachment and how a person scores on the DASS and the Poole attachment scale.

### **3.4 Study Participants**

The current research project used an online questionnaire since it would produce the most effective results among a university sample. University students are generally exposed to a variety of technology throughout their schooling, both grade school and post-secondary education. Through tech education classes, workshops and personal use, they are well versed in different forms of technology whether it is computers, tablets, and smartphones. As the sample is Saint Mary's University students, they will all have access to computers and computer log-ins. This helps eliminate the concern that respondents may not have access to the resources needed to complete the questionnaire. Seeing that the sample is university students, we know they should at least have basic reading skills needed when understanding questions. While this cannot completely eliminate the concern of comprehension, it does help to combat it.

### **3.5 Procedures**

Students will complete the online questionnaire online using Qualtrix, in any setting or time of their choosing. All students in the department will be emailed about the questionnaire and there will be a link that they may click on to bring them to the questionnaire. They will then read and sign the informed consent form and begin the questionnaire. The ethical application for this study was submitted on October 12, 2019. The submission was accepted on October 16, 2019. It is currently are being reviewed and awaiting approval by the Saint Mary's Research Ethics Board, as file number 20-020. Please see Appendix A for all REB materials.



## Demographics Table

Category	Percentages	Number of Responses
<b>What is your gender? (Male/ Female/ other box to provide answer)</b>		
Male	21.78%	22
Female	77.23%	78
Other	0.99%	1
<b>What level of schooling are you in (at the time of this survey?)</b>		
1 <sup>st</sup> year	0%	0
2 <sup>nd</sup> year	23%	23
3 <sup>rd</sup> year	44%	44
4 <sup>th</sup> year	33%	33
Honours	1%	1
Masters	0%	0
PhD	0%	0
<b>How many social media sites do you have accounts with?</b>		
1	.99%	1
2	1.98%	2
3	18.81%	19
4	26.73%	27
5	17.82%	18
6	12.87%	13
7+	20.79%	21
<b>How many times a day do you look at social media?</b>		
Not everyday	0%	0
Once a day	0%	0
2-5 times a day	7.92%	8
5-10 times a day	31.68	32
10+ times a day	60.40%	61
<b>How much time do you spend on social media in a typical day?</b>		
Less than 30 minutes	2.97%	3
30-60 minutes	11.88%	12
1-2 hours	44.55%	45
3-5 hours	37.62%	38
6+ hours	2.97%	3
<b>How often do you post on social media?</b>		
Never	0.99%	1
Every few months	31.68%	32
Every few weeks	41.58%	42
Weekly	18.81%	19
Daily	4.95%	5
A few times a day	1.98%	2
<b>Do you check social media before you go to bed?</b>		
Yes	92.08%	93
No	7.92%	8

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**Do you check social media before you get out of bed in the morning?**

Yes	81.19%	82
No	18.81%	19

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## 4. RESEARCH FINDINGS

### 4.1 Demographics

In total, 108 surveys were started and 99 were successfully completed. Most questions yielded 101 responses, but some received 99, 100, or 101. The age range of participants was 19-31. Of the 101 responses, 21% of the participants were male; 77% were female; 1% identified as other. The most common levels of schooling of the participants were; 3<sup>rd</sup> year students (44%); 4<sup>th</sup> year students (33%); 2<sup>nd</sup> year students (23%); Honours students (1%). None of the participants were 1<sup>st</sup> year students, Master's students, or PhD students. As for social media accounts, the most common number of social media accounts for the participants to use was 4 accounts per person which accounted for 27% of the sample, followed by 7+ social media accounts per person at 21% of the sample. Of the total sample of 101 participants, 60% percent of participants answered that they check their social media accounts 10+ times a day, compared to just 8% who check their accounts 2-5 times a day. No participants chose that they check their accounts once a day or not every day. As for time actually spent on social media; 45% of participants spend between 1-2 hours; 38% spends 3-5 hours; 12% spent 30-60 minutes; 3% spent less than 30 minutes; and on the high end 3% spent 6+ hours per day on social media. When it comes to posting on social media, it appears that most people post every few weeks to every few months, which accounted for 74% of respondents. Ninety-three percent of participants responded that they check social media before they go to bed, and 82% responded that they check social media before they get out of bed in the morning.

The most popular/commonly used social media sites were Snapchat and Instagram; Instagram at 92% and Snapchat at 87%. In the option to write other social media sites that were commonly used, VSCO and Reddit were popular social media accounts that participants also

tended to use. VSCO is similar to Instagram as the user posts pictures but it differs in the fact that there are no likes or comments. Users can create boards of images they like that are posted by other users. Reddit is a forum app that has different discussion boards for various topics.

Fifty-four percent stated that they have met most of the friends they have on their social media sites in person. The two most noted responses as to what participants are using social media for was; 'Keeping in touch with friends and family' at 91%; and 'Browse or waste time' at 95%. We can see from the results that students are not posting on social media as much as they are scrolling and consuming media. For a more detailed look at social media usage and following behaviours post break-up, please refer to Appendix C. In the next sections we will discuss the results of the Depression, Anxiety, Stress, Scale and the Diane Poole Attachment scale, the future direction of this study, and limitations.

#### **4.2 Following Behaviours and Social Media Usage**

The main goal of this research study was to discover if there was a correlation between social media usage influencing and resulting in increased following behaviours, similar to that of stalkers, after a break-up and if this could be influenced by Bandura's social learning theory. The questionnaire results found that students do not appear to be engaging in stalking behaviours, thus the hypothesis is not supported. Seventy to ninety percent of participants answered 'No' to the questions designed to see if they were using social media as a way to follow their ex's interaction's post breakup. Seventy-four percent of participants reported that they have not checked on an ex's location using social media. Eighty-nine percent of participants reported that they did not use the Instagram activity monitor to check on an ex's activity. This mean that even if they are witnessing and being prompted by various social networking sites to check in and follow along, this behaviour does not appear to carry over after a relationship ends. As we know

from the work of Rozatkar and Gupta (2019) cyberstalking is a continuous action performed over the internet, we are not seeing this behaviour being done by the participants in this study. Fox et al. (2010) found that stalking behaviours among college students were being reinforced and learned from peers. This would make sense as to why the opposite was found in this study where the sample is not engaging in stalker-like behaviours according to Bandura's social learning theory. This finding is consistent with Bandura's (1977) social learning theory because if students are not seeing their friend groups engaging in online following behaviours then they may not see any reward or reason to engage in these behaviours either.

In regard to the other variables measured in this study, I am lead to believe there might be a correlation between social media usage, levels of stress, anxiety, depression, and attachment styles. The results that were gathered from the DASS, DPAS and questions designed for the study will be further discussed below.

### **4.3 DASS Results**

The DASS section had 99 participants who successfully completed every question. The answers to the DASS were divided into 3 different categories that address the 3 variables being measured (Depression, Anxiety, Stress). The following were the most common scores of the participants on the DASS scale. The depression variable of the participants score was an 8, which is considered a moderate level of depression. The anxiety variable of the participants score was a 7, which is considered a moderate level of anxiety. The stress variable of the participants was an 8, which is considered a mild level of stress. The DASS found that most participants fell into the moderate range; The majority of participants answered between (1- Applied to me to some degree, or some of the time) and (2-Applied to me a considerable degree, or a good part of the time). Of the 99 participants who completed this section, between 32-71 participants fell

between this range. The most commonly answered questions were (1. I found it hard to wind down.) at 71% and (5. I found it difficult to work up the initiative to do things) at 72%. These results revealed that students are experiencing a great deal of stress, anxiety and depression. Thirty-two percent of participants admitted to feeling that life was meaningless, and 41% admitted they felt they were not worth much as a person. Many participants also fell in the moderate range and with symptoms that correlate with anxiety/panic attacks. These symptoms included: Dryness of mouth at 58%; Difficulty breathing at 41%; Trembling of the hands at 38%; Feeling close to panic at 48%.

The results of this study are consistent with that of previous research such as Shensa et al. (2017) who found their sample of 19-32 year old participants to also report depressive symptoms to a moderate degree. Consistent with prior research such as Primack et al. (2017) and Shensa et al. (2017) who had similar age ranges among their samples (19-32), also found an increase in depressive symptoms among their participants, just as was found in this study. Primack et al. (2017) and Shensa et al. (2017) also found very similar time spent using social media to the participants in this study with the social media usage of participants being around 1-2 hours a day on social media. Due to the consistency across the current study and two previous studies, it leads me to believe these symptoms could be generalizable across other groups of similar ages and similar time spent on social media at this current time.

#### **4.4 Attachment Results**

The Diane Poole Attachment Scale had 100 participants successfully complete all questions. The results stated that majority of participants had 23% secure attachment; 23.1% ambivalent/anxious attachment; 15.4% avoidant/dismissive attachment; 7.7% disorganized attachment. The forms of attachment most common in participants were secure and

ambivalent/anxious. These two main attachment styles found in participants suggest that participants feel equally secure and anxious in their relationships. This could be for a number of reasons. Based on this mixture of attachment styles the results lead me to believe that participants may feel secure in their relationships but are also attempting to make sure they are consistently meeting the needs of their partner as they are anxious of what could happen if conflict were to arise; So they are avoiding conflict by doing this. We see this from the answers like; 47% answered (Usually/often) and 36% answered (Sometimes) to the question 'In an attempt to stabilize connection, sometimes, I over-function, over-adapt, over-accommodate, or over-apologize for things I didn't do'. If we combine these two sections, at least 83% of participants feel this way in their relationships enough that they are able to recognize a pattern has formed. We see that the participants feel securely attached from questions like 'I feel relaxed with my partner most of the time' with 82% answering (Usually/often) and 'I look at my partner with kindness and caring and look forward to our time together' at 86%. We know from Menard and Pincus (2012) that stalkers in their study had insecure attachment. The majority of the participants in this study had a mix of attachment styles. This could be a reason as to why there was no correlation found with social media usage and behaviours that are similar to that of stalkers in the group of participants in this research study. In the next section I will further discuss the results of all the sections and how I believe they may influence one another and where possible correlations may be found.

#### **4.5 Discussion of Results**

The goal of this research was to use Bandura's social learning theory and look at what the impact of social media is on post breakup relationship disengagement. I investigated what role, if any, social media played in forming unhealthy attachment behaviors post break up. The results of

this research showed that participants do not appear to be engaging in stalker-like behaviours or following their ex after a break-up. Thus, the hypothesis was not supported. This study used Bandura's social learning theory as a guide, it was hypothesized that because following behaviours are now being promoted by social media, that may have been leading to a normalization of following behaviours after a breakup. The idea driving Bandura's (1977) social learning theory is that humans can learn from seeing others act in certain situations and how this observation can influence their own behavior. Simply put, if the learner observes another person who engages in a behavior that produces what they consider to be a favorable outcome then they may learn/use this behavior for themselves going forward (Bandura, 1977). If they use this behavior they have previously observed and it yielded a positive response then this means the behavior will be reinforced (Bandura, 1977). If the learner performs the behaviour they have observed and the response it yields is not favourable, then this is believed to discourage the use of this behaviour in the future (Bandura, 1977). This process can be explained throughout the four sub-processes of the social learning theory.

When looking at the other results from the DASS, DPAS, and designed questions as a whole, I see some other patterns and correlations. When looking at questions about social media usage and the results of the DASS, there is one main conclusion I draw. I believe that participants may be using social media as a tool of avoidance because of the stress and anxiety they feel. In the study, the participants admitted they find it difficult to work up the initiative to do start/complete tasks, this could be due to their levels of anxiety. It is impossible to know where exactly this anxiety is coming from as it could be several different things and these could be different for every student. Across the board, students may be stressed by school and the desire to do well. They may be stressed from juggling school, work, bills, volunteering,



maintaining a social life, keeping in contact with friends and family, or deciding what to do after they graduate. This is only a fraction of things that could cloud the minds of students and create stress. I believe it may be possible that they are using social media as a form of avoidance and a way to distract themselves from the task that are causing them to feel anxious. In the results we saw that students admitted that they use social media for browsing and wasting time, this may be in place of other activities they could be or should be doing. This may include studying, exercising, completing school projects, or anything in their life that they find stressful. As they may be using social media as a tool to distract themselves, this could explain the amount of time spent browsing/wasting time. The heightened results of depression, anxiety and stress is not a surprise. We see these same findings in studies looking at social media usage's influence on stress, depression and anxiety as discussed in the literature review. These findings support the idea that social media can have negative affects on its users (Primack et al., 2017). Primack et al. (2017) found that social media usage can have negative affects on things like physical activity and sleep quality. This research also found that by using social media, it can have negative impacts on things such as work, school and mental health (Primack et al., 2017). This could be related to how participants are using social media as a form of avoidance. Whether purposefully or not, participants may be overly engaged with social media because they do not want to engage in activities like exercise or schoolwork because it can be causing them stress. This could be from the individual not being satisfied with their physical performance or they are scared of failing, so they avoid these feelings of inadequacy by not engaging in these behaviours at all. This goes back to Bandura's (1977) idea of strengthening and punishing behaviours. Behaviours that elicit a response that is considered positive to the user will make them continue to engage in that behaviour. We know that for behaviours that do not produce a positive response that the

individuals performing the behaviour will most likely not engage in that behaviour again. This could look like an individual not want to exercise because they are not satisfied with their physical performance, so instead they will use their cellphone that connects them to friends and social media sites because it distracts them from the unpleasant feelings. By engaging with social media, this helps them avoid exercising which also means they are avoiding stressful feelings of self-perceived inadequacy. This is an example of how social media may be used as a form of avoidance in the lives of many. It is a way for the participant to not feel bad about themselves. Perhaps, the user seeing these 'perfect lives' on social media also is stopping them from initiating behaviours. They may see someone else and compare themselves, believing that they will never achieve what they have (like the perfectly sculpted body or 4.0 GPA) so they do not try.

After analyzing the results of this study, I have reflected on my own experience using social media and what I see when using it. One thing I have noticed is the countless 'memes' (funny statement followed by a corresponding picture) about things such as depression, anxiety, and stress (DAS). It seems this is a 'social norm' to identify with these posts. While it is completely normal to identify with these feelings at different points in one's life, it seems rather unhealthy to constantly be posting about these very serious matters, making light of them and having posts like this be 'trendy'. Perhaps, this is where Bandura's social learning theory comes in. Maybe individuals are seeing others post frequently about being DAS and this is causing them to believe they are this way as well, because this is what they are constantly seeing when they are scrolling online all day. They are being reminded and becoming hyper-aware of the stressors in their lives and not the positive things. As discussed by Longstreet & Brooks (2017) social media users may use social media as a way to present themselves and build relationships.

So, by ascribing to the idea that it is common among their peer group to post frequently about DAS, they will then fit in and become apart of the 'group'. Now you may think 'Why would student's care if they are in the 'in group' or not?' This may relate back to the work done by Primack et al. (2017) that found that individuals between the ages of 19-32 who use social media have greater perceived social isolation. Social isolation is defined as when an "individual lacks a sense of social belonging, true engagement with others, and fulfilling relationships" (Primack et al., 2017, P. 1). So, in order to try to fight this feeling of social isolation, students may be seeing and learning what other students are posting about. They are then learning that this yields a positive response from other students thus contributing to the collective conscious, so they will then start to engage in posting about DAS as well. When other begin to respond or like the posts they share or make, this behaviour will then be reinforced. This idea is consistent with the ideas of Bandura's (1977) social learning theory. Unfortunately because students may be posting more about DAS and using social media more, this then recreates a never ending cycle of social media usage leading to feelings of DAS and social isolation. Then in a pursuit to try to lessen these feelings they try to contribute to the collective consciousness and build relationships with others by also posting funny memes and posts about DAS.

Along with these posts there are countless other depressing posts on social media. In the past several months there has been countless posts of the increasing rates of global warming, Australian wildfires, and now the Corona Virus, and that is just to name a few. I believe this may also play a role in people's perceived wellbeing. Although there are these factors that comes into play and have role in people's happiness, I believe people may not be taking their happiness into their own hands. Life is often difficult and sad, but we have the choice to view it in rose colored glasses. We can make that mental shift and choose happiness. Of course there are individuals

who are clinically depressed or suffering from other mental disorders that make this almost impossible. I believe though that the trend of making it 'cool' to complain or say you are depressed, anxious, and stressed is having extremely negative impacts on individuals and their outlook on life. Perhaps if individuals were more focused on the happiness we see in life, we could see a huge shift in things like DAS. While this study did not find support in the idea that social learning theory may be normalizing and perpetuating following a break-up, perhaps social learning theory is manifesting in a different way.

Moving on to possible correlations between the Poole Attachment scale and the DASS. The participants have moderate levels of depression, anxiety, and stress, as well as a mix of secure and anxious/ambivalent attachment. This leads me to believe that participants are moderately stressed about their relationships, as they are with other areas in their life. In an attempt to mitigate the stress in their relationship they are attempting to overcompensate and meet the needs of their partner and avoid uncomfortable situations (e.g., arguments). From the literature on attachment, we know that when an individual feels their attachment is being threatened they may resort to extreme behaviours or actions (Watt, 2015). The behaviour or action may look like over-functioning, over-adapting, over-accommodating, or over-apologize, in an attempt to stabilize their relationship. Just as Bandura (1977) discussed, behaviour will be strengthened if the response the performer receives is desirable. By overcompensating in their relationship this is reducing anxiety which is in turn a desirable outcome, one that is worth making sacrifices for. Research from Hart et al. (2015) found anxious/ambivalent attachment styles also tend to post more on social media, which is not what we found in the participants. Due to the fact the participants had a mix of both secure and anxious/ambivalent attachment styles, this makes sense. Since they perceive their relationship to be secure, they may not feel

they need to post online to gather positive feedback and feel connected because they are receiving this positive response from their partner. Secure attachment styles also have a positive view of themselves and others, this may also be why they also have happy and loving feelings towards their partner.

## **5. CONCLUSION**

### **5.1 Limitations**

As with any research study, there are limitations. The first limitation of this research is the sample. This data can only represent the social media usage and its effects on students at Saint Mary's University, it is not generalizable across other groups. The sample also only included people between the ages of 19-31. While this sample is not generalizable across other groups, it does represent the community of Saint Mary's well. A difficulty a future researcher may face is if they are even able to replicate this study due to the ever-changing landscape of social media. Apps often raise and fade in popularity, with new ones always being created. The data in a future study may not be able to be compared if the social networking sites are completely different than those at this current time. Another limitation of this research is that the results were based off self-reported data. This means the participants may have not answered accurately to all questions as it may have been upsetting had they been completely honest with themselves regarding such sensitive topics.

### **5.2 Future Direction**

In the future, this study could be conducted again to see if things like depression, anxiety and stress have increased or decreased. It would be interesting to see how things change with a different group, and perhaps many of the future participants will have had interaction with social

media much earlier on in their lives. Whereas the participants in the current study only would have had between 10-13 years with social media, a different age group who has used social media much earlier on may have very different results. A different direction this study could go could entail looking at social media, social learning theory, the mirroring effect and how these things may affect student's views on their own experiences with depression, anxiety, and stress. This may be interesting to see if there is in fact a correlation between these variables.

### **5.3 Conclusion**

The purpose of this study was to understand if social networking sites were normalizing behaviours that are similar to that of stalkers and understand if they could be influencing following behaviours after a breakup. It was hypothesized that social learning theory had a key role in forming and normalizing these following behaviours because they are promoting the constant following of one another. The results of the study did not support this hypothesis. The results showed that students are not engaging in behaviours similar to that of stalking after a break-up. The results did show moderate levels of depression, stress, and anxiety among the sample. While this correlation cannot be proved it appears this may be linked to increased social media usage, which would be consistent with previous studies involving similar ages groups and samples. The Poole Attachment Scale suggested that participants had a mix of both secure and anxious/ambivalent attachment, due to this mix and perceived to have secure relationships may be a contributing factor as to why participants are not engaging in stalker-like behaviours post breakup. The results of the DASS suggest that participants are in the moderate range for depression, anxiety and stress, as well as commonly identifying with symptoms of anxiety attacks. Limitations of this study included issues of the results not being generalizable across various groups. The future of this research could include conducting the same study five years

from now. The results of this study support that which is cited in previous research surrounding the harmful effects of social media but does not support the hypothesis that was originally designed, so it does not appear that social learning theory is contributing to normalizing stalking behaviours.





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**APPENDIX A (ETHICS MATERIAL)****Informed Consent Statement****SAINT MARY'S UNIVERSITY  
DEPARTMENT OF CRIMINOLOGY  
INFORMED CONSENT STATEMENT**

**"What's your Snapchat?" SMU REB File #20-020  
Investigators: Erin Miller and Dr. Rachael Collins**

**WHO WE ARE**

You are invited to participate in an online questionnaire that should take between 15-20 minutes and will be conducted by Erin Miller (honours criminology) and Dr. Rachael Collins, Assistant professor in the department of criminology at Saint Mary's University.

**WHAT IS THE STUDY ABOUT?**

We often hear that social media has created a different social landscape. We communicate with each other differently, we make friends differently and we can see and post every aspect of our lives if we want to. Research is finding that many aspects of social media have the power to isolate people, and as a result, many young adults may have formed negative relationships with others. One of the relationships we are interested in looking at is dating and breaking-up in the age of social media.

**WHO CAN TAKE PART IN THE STUDY?**

We are looking for SMU students! The only criteria are that participants are 18+ and a registered student at the time. Your participation in the study is completely voluntary should you choose to participate. We are hoping to get between 100-150 SMU students to complete the questionnaire!

**COMPENSATION**

All participants in the study will get to choose which draw they want to be in. There are 2 separate draws – one will be a \$50.00 gift certificate to Amazon and the other will be a \$50.00 gift certificate to the Superstore and the choice will be yours. The odds of winning a particular gift card are dependent upon the number of entries. In order to be eligible for the draw, a participant must leave an email address so they can be contacted if they win. The participants will be asked to leave an email address at the end of the informed consent – there will be a box where participants can enter an email if they choose to do so. Email addresses will be kept confidential, and that the identity of the two winners will only be known to the secretary and she will keep this information confidential. Once a winner has been randomly chosen from each draw the secretary will contact the winner via email provided and have the gift card sent to you (you will have to provide mailing information to her if this is your preference) or it can be picked up in the Criminology office – it will be the winners preference. The researchers will not be aware of who won, simply that two people did.

The draw will be held at noon on Tuesday February 25<sup>th</sup> 2020 at Saint Mary's University.

**WHAT TYPES OF QUESTIONS WILL BE ASKED?**

Participants will be asked some personal questions about age, program of study, use of social media and relationships (this does not have to be romantic relationship, it can be relationships with friends), for example “I find myself minimizing the importance of close relationships in my life” and “Do you post pictures of yourself that you genuinely like?” Participants will also be asked a few questions about anxiety and depression. There will also be some open-ended questions where you are free to type out your responses. The researchers would like to ask that you do not use identifying information in the questionnaire (i.e. do not use your name or the name of another individual). If a participant does use identifying information the researchers will remove all names from the dataset.

### **CONFIDENTIALITY**

All the data collected from this study will not be associated with participants' name or personal information in any way. Only aggregated data will appear in any publication resulting from this study. An email address is required for the prize draw and this is not mandatory, any participant can choose to do the study and not leave an email address for the draw. However if a participant wants to leave an email address, none of the answers you provide will be affiliated with your email address because you will not be identifying yourself in the questionnaire. The questionnaire data will be collected by Qualtrics which is a secure program and will be stored on a password protected computer. Only Dr. Collins and Erin Miller will have access to the data. Please see “compensation” for details on the privacy of the draw.

### **PARTICIPATION**

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled, (you will still be in the draw for the gift card). Please note that once data collection is completed your data cannot be removed, as they are stored without identifiers. You have the right to omit any question(s)/procedure(s) you choose.

### **HOW CAN I WITHDRAW FROM THE STUDY?**

Participants can withdraw from the study at any time without affecting the results of the study. If a participant chooses to leave the study, all they have to do is close the browser window at any time during the study. However once the study is complete the participant can no longer withdraw from the study as all data is stored without identification markers. All participants are still eligible to win the gift certificate even if they withdraw from the study as all participants are asked for their email address at the end of the consent form. Please remember that this process is completely voluntary. As a participant, you are not required to leave an email if you choose not to be entered into the draw. In this case, a participant is able to complete the questionnaire, or withdraw and not be entered into the prize draw.

### **RISKS AND BENEFITS OF THE RESEARCH**

There are minimal foreseeable risks to participants. Talking about your stress and worries may be a stressful experience for some individuals. This is normal and should be temporary. If at any time you feel stress or discomfort, please feel free to stop the questionnaire at any point by closing the browser window. If this discomfort persists or worsens, please contact the head

researcher (Dr. Rachael Collins at: [r.collins@smu.ca](mailto:r.collins@smu.ca) or (902) 491-6475) and/or Counselling Services:

SMU Counseling Centre 4th floor student center (SC406) ph: 902.420.5615 Email: [counselling@smu.ca](mailto:counselling@smu.ca) OR Peer Supporters (various hours in Wellness center/SC106 during the academic year, 1st floor student center Email: [peer.support@smu.ca](mailto:peer.support@smu.ca)

Community Mental Health (Outpatient Service) for Halifax region. Outside of Halifax region see Nova Scotia Health Authority (NSHA) Mental Health and Addictions: 902-464-4110 [or] 1-855-635-4110 (Toll Free) [or] 902-429-8167 [or] 1888-429-8167 (Crisis Line).

Nova Scotia Health Authority: Mental Health and Addictions (NSHA MHA):  
Annapolis Valley, South Shore, and South West Nova Scotia 1-877-334-3431  
South Shore 1-855-273-7110

Although participants may not directly benefit from being a participant in the study, the information gathered will help researchers understand the complex nature of social media and how its use can impact the relationships of its users.

### **FEEDBACK AND PUBLICATION**

If you have questions at any time about the study or the procedures, or you experience adverse effects as a result of participating in this study, you may contact the researchers, Erin Miller at: [eemresearch@gmail.com](mailto:eemresearch@gmail.com) or Dr. Rachael Collins at [r.collins@smu.ca](mailto:r.collins@smu.ca) or by phone (902) 491-6475.

This research has been viewed and cleared by the Saint Mary's University Research Ethics Board. If you have any questions or concerns about ethical matters, you may contact the Chair of the Saint Mary's University Ethics Board at [ethics@smu.ca](mailto:ethics@smu.ca) or 420-5728. Participants should be aware that they are not waiving any legal rights they have with respect to the study.

The results of this research may go on to be published in scholarly journals or chapters in books or conference presentations. All of the results obtained from this study will be summarized to describe participants' experiences as a whole and will not single out any individuals.

You are fully entitled to receive feedback about the outcomes of this research, which will be available by September 2020. If you wish to receive feedback please contact either researcher (Dr. Rachael Collins – [r.collins@smu.ca](mailto:r.collins@smu.ca) or Erin Miller [eemresearch@gmail.com](mailto:eemresearch@gmail.com)

### **CONSENT**

I have read and I understand the above information

- I consent to the above information
- I do not consent to the above information



EMAIL TEMPLATE

What's Your Snapchat?" (REB # 20-020)

Hello SMU Students,

You are invited to participate in a study conducted by criminology honours student Erin Miller and her thesis supervisor Dr. Rachael Collins from the department of criminology at Saint Mary's University. The goal of our project is to understand what role social media plays in dating behaviors and if these experiences have been negative.

This is where you come in! To make this research possible we need students to complete a 15-20 minute questionnaire. All information pertaining to the questionnaire will be kept confidential and not connected to the individual's identity. You have from TODAY to FEBRUARY 20th 11:59pm to complete the questionnaire.

To thank you for making this research possible we will be doing a draw for **one of TWO \$50.00 gift cards!** The choice is yours; you can enter to win a \$50.00 gift card to Amazon or to the Superstore!

**To complete the survey questionnaire please click the link below:**

[https://smuniversity.qualtrics.com/jfe/form/SV\\_4Tkp8SY1xTiCGe9](https://smuniversity.qualtrics.com/jfe/form/SV_4Tkp8SY1xTiCGe9)

If you have any questions regarding the research please feel free to contact Erin Miller at [eemresearch@gmail.com](mailto:eemresearch@gmail.com) or Dr. Rachael Collins at [r.collins@smu.ca](mailto:r.collins@smu.ca).

Thank you for your help in making this research possible!

## RECRUITMENT POSTER



**Research Opportunity!**

**“What’s Your Snapchat?”**

**SMU REG. FRM #28-920**

**WHEN?** NOW to February 20<sup>th</sup>, 2020!

**WHAT?** You are invited to participate in a study conducted by criminology honours student Erin Miller and her thesis supervisor Dr. Rachael Collins from the department of criminology at Saint Mary’s University.

**WHO?** All SMU students 18+ can participate!

**WHY?** The goal of our project is to understand what role social media plays in shaping dating behaviors and if these experiences have been negative.

**WHAT TO EXPECT?** You will be asked to fill out an online survey that will take about 15-20 minutes.

**COMPENSATION?** To thank you for making this research possible all participants in the study will be eligible to win a gift card. There are 2 separate draws – one will be a \$50.00 gift certificate to Amazon and the other will be a \$50.00 gift certificate to the Superstore and the choice is yours! There is a 1 in 50 chance of winning a gift card! This draw will take place at noon on Tuesday February 20<sup>th</sup> 2020 at Saint Mary’s University.

**HOW?** To participate please follow the link below:

<https://smu.surveymonkey.com/s/4Ttp65Y1xT1CGe9>

**CONTACT:** If you have any questions regarding the research please feel free to contact Erin Miller at [erinresearch@gmail.com](mailto:erinresearch@gmail.com) or Dr. Rachael Collins at [rcollins@smu.ca](mailto:rcollins@smu.ca)

Thank you for your participation in this study

- Yes, I would like to receive results from the study (email address will be required)
- No, I do not want results from the study

Please check one of the following boxes for the prize draw. Please note that if you wish to enter the prize draw, you must provide your email address

- Yes, I want to be entered into the draw (email addresses needed\_\_\_\_\_)
- No, I do not want to be entered into the draw

(When the participant checks the box for “I want to be entered into the draw” the following will appear):

Please select which prize you would like if you are the winner (please choose only one option)

- \$50.00 Gift Card to Amazon
- \$50.00 Gift Card to Superstore

**QUESTIONNAIRE**

Questionnaire instructions:

Please note that you have the right to omit any question(s)/procedure(s) you choose.

The following questionnaire will have some open-ended questions where you are free to type out your responses. The researchers would like to ask that you do not use identifying information in the questionnaire (i.e. do not use your name or the name of another individual). If a participant does use identifying information the researchers will remove all names from the dataset. We would like to keep the study as confidential as possible.

1. **What is your age?** (actual number will be recorded)
2. **What is your gender?** (Male/ Female/ other box to provide answer)
3. **What level of schooling are you in (at the time of this survey?)** (1<sup>st</sup> year student, 2<sup>nd</sup> year student, 3<sup>rd</sup> year student, 4<sup>th</sup> year student, Honours student, MA student, PhD student)
4. **How many social media sites do you have accounts with?** (1-7+)
5. **How many times a day do you look at social media?** (Not everyday, Once a day, 2-5 times a day, 5-10 times a day, 10+ times a day)
6. **How much time do you spend on social media in a typical day?** (Less than 30 minutes, 30-60 minutes, 1-2 hours, 3-5 hours, 6+ hours)
7. **How often do you post on social media?** (Never, Every few months, Every few weeks, Weekly, Daily, A few times a day)
8. **Do you check social media before you go to bed?** (Yes, No)
9. **Do you check social media before you get out of bed in the morning?** (Yes, No)
10. **In a week, which of the following social media websites do you visit most frequently?** Instagram, Twitter, Facebook, Snapchat, TikTok , Other (Text box provided)
11. **How many friends from your social media have you met in person?** (All of them, Most of them, Half of them, Few of them, None of them)
12. **On a regular day how many times do you post pictures of yourself? (Example: Snapchat selfie with filter, Instagram story, Facebook story, updated profile pictures).** (Extremely often, Very often, Moderately often, Slightly often, Not at all often)
13. **What do you use social media for? [PLEASE CHECK ALL THAT APPLY TO YOU]** (Keeping in touch with friends and family, Event planning, Dating, Meeting new friends, Find employment, Browse or waste time, Other please specify)
14. **Has social media ever affected a social relationship with either family or friends or a romantic relationship?** (Yes, No)
15. **How many celebrities do you follow on social media?** (0-10, 11-50, 100+)

16. Do you post pictures of yourself that you genuinely like? (Yes, No, Sometimes)
17. Have you ever had your heart broken? (Yes, No)
18. Have you ever edited a photo (Facetune, photo shopped, etc.) To alter your appearance? (Yes, No)
19. If you answered 'Yes' to the previous question "Have you ever edited a photo (Facetune, photo shopped, etc.) To alter your appearance?" please provide a written response in the space provided below. If you answered "No" to the previous question, please skip this question and continue to the next question.  
How many times a week would you say you edit a picture of yourself? (Written response required)
20. Have you ever sent a snapchat to your ex hoping they will respond? (Yes, No)
21. If you answered "Yes" to the previous question "Have you ever sent a Snapchat to your ex hoping they will respond?" please select one of the options provided below. If you answered "No" to the previous question, please skip this question and continue to the next question. If yes, how often? (Extremely often, Very often, Moderately often, Slightly often, Not at all often)
22. Have you ever visited an ex's social media account? (Yes, No)
23. If you answered "Yes" to the previous question "Have you ever visited an ex's social media account?" please select one of the options provided below. If you answered "No" to the previous question, please skip this question and continue to the next question. If yes, how often? (Extremely often, Very often, Moderately often, Slightly often, Not at all often)
24. Have you ever followed your ex's friend's social media accounts to see what if they make posts with your ex? (Yes, No)
25. If you answered "Yes" to the previous question "Have you ever followed your ex's friend's social media accounts to see what if they make posts with your ex?" please select one of the options provided below. If you answered "No" to the previous question, please skip this question and continue to the next question. If yes, how often? (Written response required)
26. Have you ever become jealous after seeing your ex interact with others on social media? (Yes, No)
27. If you answered "Yes" to the previous question "Have you ever become jealous after seeing your ex interact with others on social media?" please provide a written response in the space provided below. If you answered "No" to the previous question, please skip this question and continue to the next question. If you answered yes and have become jealous after seeing your ex interact with others on social media, what was your reaction? (Written response required)
28. Have you ever made a post in hope that your ex would see it? (Yes, No)
29. Have you ever made a post for the purpose of getting likes? (Yes, No)
30. Did you use the activity monitor on Instagram to see who and what your ex liked? (Yes, No)

- 31. If you answered “Yes” to the previous question "Did you use the activity monitor on Instagram to see who and what your ex liked?" please provide a written response in the space provided below. If you answered “No” to the previous question, please skip this question and continue to the next question. If yes, did what you see make you jealous? (Written response required)**
- 32. Have you ever checked on an ex's location using social media?**
- 33. If you answered “Yes” to the previous question "Have you ever checked on an ex's location using social media? " please provide a written response in the space provided below. If you answered “No” to the previous question, please skip this question and continue to the next question. If yes, what did you do? (Written response required)**
- 34. Have you ever used a friends account to view your ex's profile on social media (Instagram, Snapchat, Facebook, twitter)? (Yes, No)**
- 35. Do you feel happy if an ex likes your social media posts? (Yes, No)**
- 36. Do you have saved photos of your ex? (Yes, No)**
- 37. If you answered “Yes” to the previous question "Do you have saved photos of your ex? please provide a written response in the space provided below. If you answered no to the previous question, please skip this question and continue to the next question. If yes, how do they make you feel when you look at them? (Written response required)**
- 38. Have you ever become jealous after seeing your ex interact with others on social media? (Yes, No)**
- 39. If you answered “Yes” to the previous question "Have you ever become jealous after seeing your ex interact with others on social media? " please provide a written response in the space provided below. If you answered “No” to the previous question, please skip this question and continue to the next question. If yes, what was your reaction? (Written response required)**

“When completing this questionnaire, please focus on one significant relationship – ideally a current or past partner as the focus here is on adult relationships. This does not necessarily need to be a romantic relationship but must be the individual with whom you feel the most connection. Who is your primary “go to” person if you’re sick, in trouble, want to celebrate, call with news, etc.

When responding, consider how strongly you identify with each statement – disagree, mostly agree, strongly agree. Using the scale below, respond in the space provided”

The following questions will use a 3-point likert scale

**(Rarely/Never) (Sometimes) (Usually/ Often)**

1. I find myself minimizing the importance of close relationships in my life.

2. It is important for my partner to keep arrangements simple and clear because I am easily confused or disoriented, especially when stressed.
3. I want closeness but am also afraid of the one I desire to be close with. I get stuck in approach-avoidance patterns with my partner.
4. I struggle to feel safe with my partner.
5. It is difficult for me to be alone. If alone, I feel stressed, abandoned, hurt, and/or angry.
6. It is easier for me to think things through than to express myself emotionally.
7. I often find eye contact uncomfortable and/ or particularly difficult to maintain.
8. I am always yearning for something or someone that I feel I cannot have.
9. I feel comfortable expressing my own needs.
10. I have an exaggerated startle response when others approach me unexpectedly.
11. I feel relaxed with my partner most of the time.
12. I want to be close with my partner but feel angry at my partner at the same time.
13. I can keep secrets, protect my partner's privacy, and respect boundaries.
14. In an attempt to stabilize connection, sometimes, I over-function, over-adapt, over-accommodate, or over-apologize for things I didn't do.
15. It is difficult for me to say NO or to set realistic boundaries.
16. Keeping agreements with my partner is a priority.
17. I often expect the worst to happen in my relationship.
18. I insist on self-reliance; I do many of life's tasks or my hobbies, alone and I have difficulty reaching out when I need help.
19. When I lose a relationship, at first I tend to experience separation elation and then become depressed
20. I look at my partner with kindness and caring and look forward to our time together.
21. My partner often comments or complains that I am controlling.
22. After anxiously awaiting my partner's arrival, I end up picking fights.

23. I chronically second-guess myself and sometimes wish I had said something differently.
24. My instinctive self-protective responses are often unavailable when possible danger is present – leaving me feeling immobilized, disconnected, or “gone”.
25. I am comfortable being affectionate with my partner.
26. I tend to prefer relationships with things or animals instead of people.
27. I feel that people are essentially good at heart.
28. Sometimes I prefer casual sex over a committed relationship.
29. At the same time as I feel a deep wish to be close with my partner, I also have a paralyzing fear of losing the relationship.
30. I tend to lose myself in relationships because I tend to over-focus on others.
31. I attempt to discover and meet the needs of my partner whenever possible.
32. When I give more than I get, I often become resentful and/ or harbor a grudge.

The following questions will use a 4-point number system. The top of the section in in on-line questionnaire will have the following information”

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you *over the past week*. There is no right or wrong answers. Do not spend too much time on any statement

*The rating scale is as follows:*

0 Did not apply to me at all

1 Applied to me to some degree, or some of the time

2 Applied to me to a considerable degree, or a good part of time

3 Applied to me very much, or most of the time

1. I found it hard to wind down **0 1 2 3**
2. I was aware of dryness of my mouth
3. I couldn't seem to experience any positive feeling at all
4. I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)
5. I found it difficult to work up the initiative to do things



6. I tended to over-react to situations
7. I experienced trembling (eg, in the hands)
8. I felt that I was using a lot of nervous energy
9. I was worried about situations in which I might panic and make a fool of myself
10. I felt that I had nothing to look forward to
11. I found myself getting agitated
12. I found it difficult to relax
13. I felt down-hearted and blue
14. I was intolerant of anything that kept me from getting on with what I was doing
15. I felt I was close to panic
16. I was unable to become enthusiastic about anything
17. I felt I wasn't worth much as a person
18. I felt that I was rather touchy
19. I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)
20. I felt scared without any good reason
21. I felt that life was meaningless

**APPENDIX: B**

**What's Your Snapchat? – Code Book**

**1. What is your age?**

(actual number will be recorded)

**2. What is your gender? (Male/ Female/ other box to provide answer)**

Male – 1

Female- 2

Other – 3

**3. What level of schooling are you in (at the time of this survey?)**

1<sup>st</sup> year student - 1

2<sup>nd</sup> year student - 2

3<sup>rd</sup> year student - 3

4<sup>th</sup> year student - 4

Honours student - 5

MA student - 6

PhD student – 7

**4. How many social media sites do you have accounts with?**

1 – 1

2 – 2

3 – 3

4 – 4

5 – 5

6 – 6

7+ - 7

**5. How many times a day do you look at social media?**

Not everyday - 1

Once a day - 2

2-5 times a day - 3

5-10 times a day - 4

10+ times a day – 5

**6. How much time do you spend on social media in a typical day?**

Less than 30 minutes - 1

30-60 minutes - 2

1-2 hours - 3

3-5 hours - 4

6+ hours – 5

**7. How often do you post on social media?**

Never - 1

Every few months - 2

Every few weeks - 3

Weekly - 4

Daily - 5

A few times a day – 6

**8. Do you check social media before you go to bed?**

Yes – 1

No -2

**9. Do you check social media before you get out of bed in the morning?**

Yes – 1

No -2

**10. In a week, which of the following social media websites do you visit most frequently?**

Instagram - 1

Twitter - 2

Facebook - 3

Snapchat - 4

TikTok - 5

Other – 6

**11. How many friends from your social media have you met in person?**

All of them - 1

- Most of them - 2
- Half of them - 3
- Few of them - 4
- None of them – 5

**12. On a regular day how many times do you post pictures of yourself? (Example: Snapchat selfie with filter, Instagram story, Facebook story, updated profile pictures).**

- Extremely often – 1
- Very often – 2
- Moderately often – 3
- Slightly often – 4
- Not at all often – 5

**13. What do you use social media for? [PLEASE CHECK ALL THAT APPLY TO YOU]**

- Keeping in touch with friends and family – 1
- Event planning – 2
- Dating – 3
- Meeting new friends – 4
- Find employment – 5
- Browse or waste time – 6
- Other please specify – 7

**14. Has social media ever affected a social relationship with either family or friends or a romantic relationship?**

- Yes – 1
- No – 2

**15. How many celebrities do you follow on social media?**

- 0-10 - 1
- 11-50 - 2
- 100+ - 3

**16. Do you post pictures of yourself that you genuinely like?**

- Yes – 1
- No – 2
- Sometimes – 3

**17. Have you ever had your heart broken?**

- Yes – 1
- No – 2

**18. Have you ever edited a photo (facetune, photo shopped, etc.) To alter your appearance?**

- Yes – 1
- No – 2

**19. If you answered 'Yes' to the previous question "Have you ever edited a photo (facetune, photo shopped, etc.) To alter your appearance?" please provide a written response in the space provided below. If you answered "No" to the previous question, please skip this question and continue to the next question.**

**How many times a week would you say you edit a picture of yourself? (Written response required)**

(Written response required)

**20. Have you ever sent a snapchat to your ex hoping they will respond?**

- Yes – 1
- No – 2

**21. If you answered "Yes" to the previous question "Have you ever sent a Snapchat to your ex hoping they will respond?" please select one of the options provided below. If you answered "No" to the previous question, please skip this question and continue to the next question.**

**If yes, how often?**

- Extremely often – 1
- Very often – 2
- Moderately often – 3

Slightly often – 4  
Not often at all – 5

**22. Have you ever visited an ex's social media account?**

Yes – 1  
No – 2

**23. If you answered “Yes” to the previous question "Have you ever visited an ex's social media account?" please select one of the options provided below. If you answered “No” to the previous question, please skip this question and continue to the next question.**

**If yes, how often?**

Extremely often – 1  
Very often – 2  
Moderately often – 3  
Slightly often – 4  
Not often at all – 5

**24. Have you ever followed your ex's friend's social media accounts to see what if they make posts with your ex?**

Yes – 1  
No – 2

**25. If you answered “Yes” to the previous question "Have you ever followed your ex's friend's social media accounts to see what if they make posts with your ex?" please select one of the options provided below. If you answered “No” to the previous question, please skip this question and continue to the next question.**

**If yes, how often?**

Extremely often – 1  
Very often – 2  
Moderately often – 3  
Slightly often – 4  
Not often at all – 5

**26. Have you ever become jealous after seeing your ex interact with others on social media?**

Yes – 1

No – 2

**27. If you answered “Yes” to the previous question "Have you ever become jealous after seeing your ex interact with others on social media?" please provide a written response in the space provided below. If you answered “No” to the previous question, please skip this question and continue to the next question.**

**If you answered yes and have become jealous after seeing your ex interact with others on social media, what was your reaction?**

(Written response required)

**28. Have you ever made a post in hope that your ex would see it?**

Yes – 1

No – 2

**29. Have you ever made a post for the purpose of getting likes?**

Yes – 1

No – 2

**30. Did you use the activity monitor on Instagram to see who and what your ex liked?**

Yes – 1

No – 2

**31. If you answered “Yes” to the previous question "Did you use the activity monitor on Instagram to see who and what your ex liked?" please provide a written response in the space provided below. If you answered “No” to the previous question, please skip this question and continue to the next question.**

**If yes, did what you see make you jealous?**

(Written response required)

**32. Have you ever checked on an ex's location using social media?**

Yes – 1

No – 2

**33. If you answered “Yes” to the previous question "Have you ever checked on an ex's location using social media? " please provide a written response in the space provided below. If you answered “No” to the previous question, please skip this question and continue to the next question.**

**If yes, what did you do?**

(Written response required)

**34. Have you ever used a friends account to view your ex's profile on social media (Instagram, Snapchat, Facebook, twitter)?**

Yes – 1

No – 2

**35. Do you feel happy if an ex likes your social media posts?**

Yes – 1

No – 2

**36. Do you have saved photos of your ex?**

Yes – 1

No – 2

**37. If you answered “Yes” to the previous question "Do you have saved photos of your ex? please provide a written response in the space provided below. If you answered no to the previous question, please skip this question and continue to the next question.**

**If yes, how do they make you feel when you look at them?**

(Written response required)

**38. Have you ever become jealous after seeing your ex interact with others on social media?**



Yes – 1

No – 2

- 39. If you answered “Yes” to the previous question "Have you ever become jealous after seeing your ex interact with others on social media? " please provide a written response in the space provided below. If you answered “No” to the previous question, please skip this question and continue to the next question.**

**If yes, what was your reaction?**

**(Written response required)**

## **SECTION 2 – The Diane Poole Attachment Scale**

- 1. I find myself minimizing the importance of close relationships in my life.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

- 2. It is important for my partner to keep arrangements simple and clear because I am easily confused or disoriented, especially when stressed.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

- 3. I want closeness but am also afraid of the one I desire to be close with. I get stuck in approach-avoidance patterns with my partner.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

- 4. I struggle to feel safe with my partner.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

- 5. It is difficult for me to be alone. If alone, I feel stressed, abandoned, hurt, and/or angry.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

- 6. It is easier for me to think things through than to express myself emotionally.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

- 7. I often find eye contact uncomfortable and/ or particularly difficult to maintain.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

- 8. I am always yearning for something or someone that I feel I cannot have.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

- 9. I feel comfortable expressing my own needs.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

- 10. I have an exaggerated startle response when others approach me unexpectedly.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

**11. I feel relaxed with my partner most of the time.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

**12. I want to be close with my partner but feel angry at my partner at the same time.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

**13. I can keep secrets, protect my partner's privacy, and respect boundaries.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

**14. In an attempt to stabilize connection, sometimes, I over-function, over-adapt, over-accommodate, or over-apologize for things I didn't do.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

**15. It is difficult for me to say NO or to set realistic boundaries.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

**16. Keeping agreements with my partner is a priority.**

Rarely/Never - 1  
Sometimes - 2

Usually /Often -3

**17. I often expect the worst to happen in my relationship.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**18. I insist on self-reliance; I do many of life's tasks or my hobbies, alone and I have difficulty reaching out when I need help.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**19. When I lose a relationship, at first I tend to experience separation elation and then become depressed.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**20. I look at my partner with kindness and caring and look forward to our time together.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**21. My partner often comments or complains that I am controlling.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**22. After anxiously awaiting my partner's arrival, I end up picking fights.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**23. I chronically second-guess myself and sometimes wish I had said something differently.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**24. My instinctive self-protective responses are often unavailable when possible danger is present – leaving me feeling immobilized, disconnected, or “gone”.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**25. I am comfortable being affectionate with my partner.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**26. I tend to prefer relationships with things or animals instead of people.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**27. I feel that people are essentially good at heart.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**28. Sometimes I prefer casual sex over a committed relationship.**

Rarely/Never - 1

Sometimes - 2

Usually /Often -3

**29. At the same time as I feel a deep wish to be close with my partner, I also have a paralyzing fear of losing the relationship.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

**30. I tend to lose myself in relationships because I tend to over-focus on others.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

**31. I attempt to discover and meet the needs of my partner whenever possible.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

**32. When I give more than I get, I often become resentful and/ or harbor a grudge.**

Rarely/Never - 1  
Sometimes - 2  
Usually /Often -3

### SECTION 3 – The DASS

**40. I found it hard to wind down**

Did not apply to me at all - 1  
Applied to me to some degree, or some of the time - 2  
Applied to me to a considerable degree, or a good part of the time - 3  
Applied to me very much, or most of the time - 4

**41. I was aware of dryness of my mouth**

Did not apply to me at all - 1  
Applied to me to some degree, or some of the time - 2  
Applied to me to a considerable degree, or a good part of the time - 3  
Applied to me very much, or most of the time - 4

**42. I couldn't seem to experience any positive feeling at all**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**43. I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**44. I found it difficult to work up the initiative to do things**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**45. I tended to over-react to situations**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**46. I experienced trembling (eg, in the hands)**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**47. I felt that I was using a lot of nervous energy**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**48. I was worried about situations in which I might panic and make a fool of myself**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**49. I felt that I had nothing to look forward to**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**50. I found myself getting agitated**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**51. I found it difficult to relax**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**52. I felt down-hearted and blue**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**53. I was intolerant of anything that kept me from getting on with what I was doing**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4



**54. I felt I was close to panic**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**55. I was unable to become enthusiastic about anything**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**56. I felt I wasn't worth much as a person**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**57. I felt that I was rather touchy**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**58. I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**59. I felt scared without any good reason**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**60. I felt that life was meaningless**

Did not apply to me at all - 1

Applied to me to some degree, or some of the time - 2

Applied to me to a considerable degree, or a good part of the time - 3

Applied to me very much, or most of the time - 4

**APPENDIX D****In a week, which of the following social media websites do you visit most frequently?**

Instagram	27.63%	92
Twitter	11.41%	38
Facebook	21.02%	70
Snapchat	26.13%	87
TikTok	7.81%	26
Other	6.01%	20

**How many friends from your social media have you met in person?**

All of them	13.86%	14
Most of them	53.47%	54
Half of them	15.84%	16
Few of them	14.85%	15
None of them	1.98%	2

**On a regular day how many times do you post pictures of yourself? (Example: Snapchat selfie with filter, Instagram story, Facebook story, updated profile pictures).**

Extremely often	1.98%	2
Very often	6.93%	7
Moderately often	19.80%	20
Slightly often	26.73%	27
Not at all often	44.55%	45

**What do you use social media for? [PLEASE CHECK ALL THAT APPLY TO YOU]**

Keeping in touch with friends and family	28.53%	91
Event planning	11.91%	38
Dating	8.15%	26
Meeting new friends	10.03%	32
Find employment	8.46%	27
Browse or waste time	29.78%	95
Other please specify	3.13%	10

**Has social media ever affected a social relationship with either family or friends or a romantic relationship?**

Yes	60.40%	61
No	39.60%	40

**How many celebrities do you follow on social media?**

0-10	55.45%	56
11-50	39.60%	40
100	4.95%	5

**Do you post pictures of yourself that you genuinely like?**

Yes	83.17%	84
No	2.97%	3
Sometimes	13.86%	14

**Have you ever had your heart broken?**

Yes	78.22%	79
No	21.78%	22

**Have you ever edited a photo (facetune, photo shopped, etc.) To alter your appearance?**

Yes	35.64%	36
No	64.36%	65

**Have you ever sent a snapchat to your ex hoping they will respond?**

Yes	42.57%	43
No	57.43%	58

**Have you ever visited an ex's social media account?**

Yes	86.14%	87
No	13.86%	14

**Have you ever followed your ex's friend's social media accounts to see what if they make posts with your ex?**

Yes	26.73%	27
No	73.27%	74

**Have you ever become jealous after seeing your ex interact with others on social media?**

Yes	37.62%	38
No	62.38%	63

**Have you ever made a post in hope that your ex would see it?**

Yes	60.40%	61
No	39.60%	40

**Have you ever made a post for the purpose of getting likes?**

Yes	69.31%	70
No	30.69%	31

**Did you use the activity monitor on Instagram to see who and what your ex liked?**

Yes	11.88%	12
No	88.12%	89

**Have you ever checked on an ex's location using social media?**

Yes	25.74%	26
No	74.26%	75

**Have you ever used a friends account to view your ex's profile on social media (Instagram, Snapchat, Facebook, twitter)?**

Yes	35.00%	35
No	65.00%	65

**Do you feel happy if an ex likes your social media posts?**

Yes	48.00%	48
No	52.00%	52

**Do you have saved photos of your ex?**

Yes	28.00%	28
No	72.00%	72

**Have you ever become jealous after seeing your ex interact with others on social media?**

## WHAT'S YOUR SNAPCHAT?

Miller 93

Yes	29.00%	29
No	71.00%	100