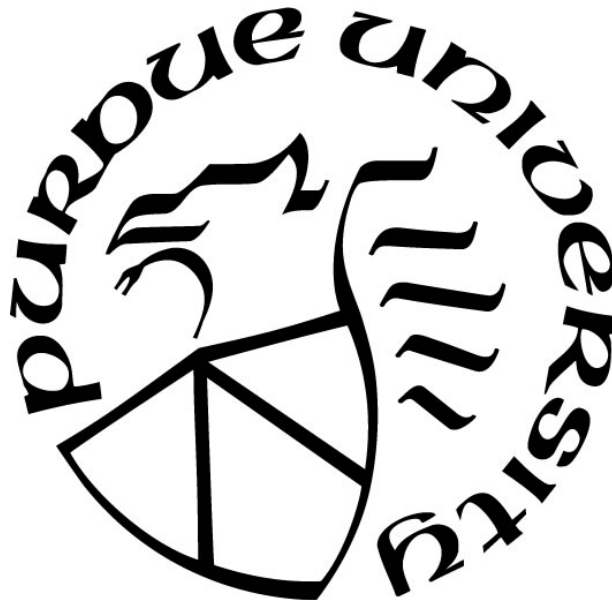# SOCIAL NETWORKING SITE USE AS A PREDICTOR OF RELATIONSHIP SATISFACTION, SELF-ESTEEM, AND SOCIAL COMPARISON ORIENTATION

by

Kaitlyn Gantz

A Thesis

Submitted to the Faculty of Purdue University

In Partial Fulfillment of the Requirements for the degree of

Master of Science

Department of Behavioral Sciences

Hammond, Indiana

May 2020

THE PURDUE UNIVERSITY GRADUATE SCHOOL
STATEMENT OF COMMITTEE APPROVAL

Dr. David P. Nalbone, Chair

Department of Behavioral Sciences

Dr. Christopher K. Belous

Department of Behavioral Sciences

Dr. Cezara Crisan

Department of Behavioral Sciences

Approved by:

Dr. Megan J. Murphy

This thesis is dedicated to my parents and my partner who offered their continual love and support throughout this process.

ACKNOWLEDGMENTS

First and foremost, I would like to thank my committee members for their countless hours of support during this process. I know it was a long one, but I would not have been able to do it without them. Dr. B especially made this journey possible as he helped hold my hand through the nightmare of the data analyses process and explained all the crazy statistics to me. He supported me with such grace and patience and really helped me keep my sanity, not just with working on this thesis, but with getting through this program. Dave, my committee chair, also contributed to my understanding of statistics and always continued to offer words of support. Despite my challenges with writing this thesis, Dave never discouraged me and made himself available to help me as much as possible. I also appreciate and want to thank Cezara Crisan for providing me with insight, especially in my literature review section, and for her positivity which made her such a joy to have on my committee.

I would also like to thank my wonderful parents. I am lucky to not only have two amazing parents, but four! My parents have provided me with so much nurture and support over the past three years, although I am sure I drove them crazy in the process. Moving out of state was a huge step for me, yet with my parent's encouragement and support, I always felt like I was close to home. I appreciate their contributions throughout my grad school experience, which I strongly attribute to my success.

Eric, my partner, deserves so many thanks for his love and support. He picked me up when I was feeling the most down and when I did not think I was going to be able to do it. He continually pushed me to move forward and did not allow me to quit, although there were MANY times that I had wanted to. Thank you for wiping my tears, holding my hand, and giving me words of wisdom (and also allowing me to get a puppy!). I am so lucky to have met you and feel honored to have found love with someone who pushes me to be my best self. You are my rock, and more importantly my home.

Lastly, I would like to thank my siblings. My sister, Lauren, was a huge source of support and love to me. She was my confidant and listened with open ears. She was always there for me when I needed it. She is my best friend and deserves recognition for the countless hours we would talk on the phone and I would vent to her about everything and anything. My twin brother, Brad, always offered me support through his humor and surprise FaceTime calls. I don't think I

have ever told him this, but those moments I got to talk to him gave me so much laughter that created light, even in my darkest of times. I am so lucky to have so many people in my academic life and my personal life who love me and support me in every way possible. Again, I would not have made it this far without them.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

The current research study examined the way that social networking site use impacts individuals' self-esteem in relation to their romantic relationship, relationship satisfaction, and social comparison orientation. Previous research has established links between SNS use and negative mental health outcomes, but no current research studies SNS use, specifically time spent on SNS use, and how it relates to self-esteem, relationship satisfaction, and social comparison orientation. Using social comparison theory, this study predicted that increased time spent on SNSs would negatively impact relationship satisfaction, self-esteem, and positively predict social comparison orientation. An online survey was used to test the relationship among these variables by asking questions and using scales related to relationship satisfaction, relationship contingent self-esteem, and social comparison orientation, while looking at how time spent on SNS impacted these results, as well as how often an individual posts about their relationship impacted the results. Structural equation modeling was used to analyze the data. This study found that increased time spent on SNS platforms did negatively impact relationship satisfaction and self-esteem, as well as positively predict social comparison orientation. Although, some of the hypotheses were not supported or were only partially supported, the findings from this study further show the importance of understanding SNS use, especially in the clinical context, so it can be assessed and utilized in the therapy setting.

CHAPTER 1: INTRODUCTION

Statement of the Problem

Ever heard of *Six Degrees*? It was the first social networking site (SNS) introduced in 1997. Since that time, SNS use has skyrocketed in recent years thanks to the introduction of new and popular sites such as Twitter, Snapchat, Instagram, and Facebook. From 2005 to 2019 the rates of social media use have increased from 5% of American adults using at least one social media site, to over 72% of Americans (Pew Research Center, 2019a). Statistics vary in regard to demographics of users, but young adults (18-29 years of age) are amongst the most frequent users of SNSs. Facebook has long dominated the social media game with the largest active user platform, as its users vary the most in terms of age, race, income, and education level. This increase in social media use may be attributed to the ease of access of SNSs, which are accessible via mobile devices, computers, and even televisions. Adults in the 18-29 age group have a 94% ownership rate of a mobile device which may account for their increased usage of SNSs (Pew Research Center, 2019a). Adults in the 30-49 age group report an 89% ownership rate and adults in the 50-65 age group report a 73% ownership rate (Pew Research Center, 2019a). Individuals in the 65 and older age group report the lowest ownership rates at 46%. As to the trend in mobile device ownership, SNS usage follows a similar correlation between age and use. As of February 2019, 18-29-year-old SNS users report the highest rates at 90% using at least one SNS, users between the ages of 30-49 report an 82% usage rate, 50-64 year olds report a 69% usage rate, and lastly 65 and older users report a 40% usage rate (Pew Research Center, 2019a).

Individuals utilize SNSs in a variety of ways. SNSs "allow users to maintain an individual profile, connect with others, and observe the extended network through linked users" (Fox, Osborn, & Warber, 2014, p. 527). In simpler terms, SNS users are able to upload personal information in the forms of posts, to share pictures and videos, to "like" other users posted content, and to chat with other users whether publicly (by commenting on others posts) or privately (by direct messaging someone).

Most users (74% of users of Facebook and 61% of users of Instagram) reported that they check the sites daily. The rates for other SNSs vary, but are still significantly high and generally

above 50% for daily use (Pew Research Center, 2019a). This incredible exposure to SNSs has been found to impact self-esteem (Vogel, Rose, Roberts, & Eckles, 2014), body image (Burnette, Kwitowski, & Mazzeo, 2017), and romantic relationships (Fox et al., 2014). SNSs also provide a platform for users to compare their posted information or profiles to other users. Social comparison theory, proposed by Leon Festinger (1954), describes humans' tendencies to simply compare themselves to others, specifically as a lens to observe online behaviors and outcomes. Individuals will relate information pertaining to others, such as their abilities or inabilities, and failures and achievements, to themselves (Mussweiler, Rüter, & Epstude, 2004). This innate inclination to compare can be impacted by individuals' access to and usage of SNSs, especially time spent on the site. Tendencies to compare the self have also been seen to impact comparisons of individuals' romantic relationships, *coined relationship social comparison* (Smith LeBeau & Buckingham, 2008). Relationship social comparison (RSC) is defined in the current literature as "tendencies to evaluate one's relationship by comparing it to other people's relationships" (Smith LeBeau & Buckingham, 2008, p. 72). This definition could be extended to include comparing relationships through SNSs.

It is important to consider the impact that social media has on RSC and relationship satisfaction, especially in light of the high rates of social media use across virtually all demographics. There has been an established link between social comparison and self-esteem, as well as between relationship satisfaction and self-esteem, but there is a lack of research regarding how rates of social media use (hours per day) impact self-esteem, specifically relationship-contingent self-esteem (RCSE), and relationship satisfaction simultaneously while incorporating a social comparison lens. This study aims to examine these variables to assess their inter-relationships and their effects on overall relationship satisfaction.

CHAPTER 2: SIGNIFICANCE OF THE PROBLEM

Social Networking Sites and Mental Health Variables

Most of us describe Facebook and Instagram as social media, but that is a misnomer. According to Rus and Tiemensma (2017) there is a distinction between what they label as social media and social networking sites (SNSs). 'Social media' refers to applications that allow for the exchange of user-generated content, including blogs and video sharing platforms, such as YouTube (Kaplan & Haenlein, 2010; Rus & Tiemensma, 2017). SNSs are defined as platforms that allow for the maintenance of social relationships within one's own social network (Ellison, 2007; Rus & Tiemensma, 2017). This definition relates more to this study as the SNSs being examined exclusively allow for interactions in social relationships and staying up-to-date with other users' social lives. There are many different SNSs, with the most commonly used being Facebook, Instagram, Snapchat, and Twitter (Pew Research Center, 2019b). Statistics vary depending on demographics, but the most frequent users of SNSs are between the ages of 18-24 (Pew Research Center, 2019a). The popularity and increased use of these four SNSs in younger generations led to the decision to include them in this study.

SNSs are easily accessible and available due to the increase in technology with internet functions. Individuals can access SNSs from phones, computers, televisions, watches, and even refrigerators. There is limited research on impacts of daily and weekly use of SNSs. This "gap" in the literature leaves researchers blind to the negative impacts that daily SNS use has on its users, especially due to the increase in extensive SNS use. SNS use has been correlated with negative outcomes (Blackwell, Leaman, Tramposch, Osborne, & Liss, 2017; Kim & Chock, 2015), but estimated time spent on SNSs has never been used as a factor, unless when looking at internet addiction. It is known that 70% of Americans use SNSs and worldwide internet users spend an average of 136 minutes per day on social media (Statista, 2018). As a clinician, it is important to understand further how time spent on social media may impact clients, especially relationally.

In recent years, internet use has often been studied alongside internet addiction. Internet use, specifically addictive internet use, has been linked to lower self-esteem, but there is a debate about whether or not lowered self-esteem is a "cause or consequence of excessive internet use"

(Niemz, Griffiths, & Banyard, 2005, p. 568). Armstrong, Phillips, and Saling (2000) found that having (lower) self-esteem was a predictor of internet addiction as well as the amount of time individuals spent on the internet each week. Some of this internet use may include time spent on SNSs, which is why it is important to understand how SNS users are spending their time on SNSs and how often.

Social Networking Sites and Social Comparison

A study that examined individuals' use of Facebook, the most common SNS site, in relation to perceived happiness, found that the more individuals used Facebook, the happier they perceived other people to be (Chou & Edge, 2012). The constant access and viewing of "happy pictures" or "posts" that sites such as Facebook provide led individuals to believe other people are leading happier lives than they actually are, which in turn led to feelings that "life is not fair", which could lead to decreases in self-esteem. Such posts can include photos of couples or friends engaging in miscellaneous activities, posts of friends getting engaged or married, posts about buying a new home or car, or posts about getting a new job or promotion. These types of posts tend to be "happy" posts and give other followers or friends of the user a sense that this individual is happy, potentially happier than they are. For example, if someone shares a post about being promoted at work, it allows for the opportunity to compare employment situations. So, for people who just lost a job or are in a lower position in their field, they may feel worse about themselves in comparison to the individual who just received the promotion. The content of posts can hypothetically present more opportunity for social comparison. As will be discussed below, humans have an innate tendency to compare, specifically with others whom they find to be "similar." Typically, a majority of friends or followers on individuals SNS sites have some form of relationship to the user, whether they are friends, family members, or acquaintances. Thus, human beings may be more apt to engage in social comparison when using SNSs.

Social Networking Sites, Social Comparison Theory, and Mental Health

Although the fact that the most frequent users of SNSs are young adults, children are also engaging with SNSs. A recent CNN report detailed that half of all kids report some form of social media usage by age 12 (Howard, 2018). This is an especially sensitive time for children,

especially in relation to their learning, and may impact how they shape their views of society and make meaning of the world and of themselves. Within the field of psychology and human development, several learning theories help to understand how humans make meaning of the world and how they come to understand the world around them. Albert Bandura's (1977) social learning theory posits that humans learn from each other, specifically through observation of others' behaviors. Lev Vygotsky's (1978) social development theory similarly understands development as being a derivative of learning, which is carried out by social interactions with others. Both of these theories understand learning as a precursor of development and that learning is achieved in social contexts. Continuing with the work of Vygotsky, social constructivism focuses on learning that takes place when an individual is in interaction with a group and views it as a collaborative process. Social comparison theory, proposed and developed by Leon Festinger in 1954, posits individuals' innate drive to evaluate themselves, specifically their abilities and opinions, by comparing themselves to others, as in social learning theory and social development theory, typically within social contexts and early in life. Social comparisons are thought to begin in early childhood with children "learn(ing) to observe others and compare their own standards, performance abilities, and reward outcomes with those of others" (Masters, 1972, p. 131).

Social comparisons are omnipresent in human nature, with individuals typically being drawn to making comparisons in relation to someone that they view as similar depending on the context in which the social comparison is taking place. Social comparisons can often be categorized into two types: upward social comparisons and downward social comparisons. Individuals engage in upward social comparison when they compare themselves to "superior" others with positive characteristics, often in order to motivate themselves to achieve more. In contrast, a downward social comparison occurs when individuals compare themselves to "inferior" others who possess negative characteristics, often in order to boost their self-esteem (Vogel et al., 2014). SNSs are thought to contribute to upward social comparisons in that SNSs allow for increased interactions and exposure to others' personal information. Although this may seem like a positive thing, upward social comparisons tend to lead to feelings of inadequacy and negative affect (Marsh & Parker, 1984; Pyszczynski, Greenberg, & LaPrelle, 1985; Vogel et al., 2014). SNSs also facilitate formation of new relationships and the ability to connect with others, and give access to information, such as relationship status, accomplishments, and activities, to

which others they can ultimately compare their own lived lives or online profiles (Vogel, Rose, Okdie, Eckles, & Franz, 2015).

Social comparison, including social media based social comparison, contributes to individuals developing an increased need for perceived acceptance and approval from peers (Stapleton, Luiz, & Chatwin, 2017). This semblance of approval impacts SNS users' overall identity and self-worth. Stapleton et al. (2017) found, while researching the role of social comparison in Instagram use amongst emerging adults, that social comparison on Instagram provides young people whose self-worth is contingent on approval from others an opportunity to exercise their self-validation goals, and subsequently to authenticate their self-worth. This idea highlights terms that are referred to as contingent self-esteem and contingent self-worth. Contingent self-esteem represents the way we perceive ourselves and thus place value on ourselves in relation to the perceived approval of others. For example, contingent self-esteem can be translated into how many "likes" a post, picture, or status might get on SNSs. The more "likes" would reflect higher approval from others and would therefore contribute to higher self-esteem or self-worth, which fits the notion that SNSs can impact overall self-esteem as well as other mental health outcomes (e.g., depression, negative affect, feelings of inadequacy). However, there are varying factors that may play a role in the process and impact the making of social comparisons.

Impact of Social Comparison "Orientation"

Social comparison orientation refers to the frequency and extent to which people compare themselves with others (Buunk, Dijkstra, Bosch, Dijkstra, & Barelds, 2012). Although social comparisons are virtually universal, certain factors may contribute to an individual's tendencies or frequencies to compare oneself to others. Buunk and Gibbons (1999) developed a scale that assesses an individual's social comparison orientation. Individuals who are "high" in social comparison orientation tend to engage in more comparisons than individuals with a low social comparison orientation. In addition, individuals with high social comparison orientation tend to have lower self-esteem and negative affectivity. There are also social comparisons orientations related to social comparison of ability and social comparison of opinion, which subsequently relates to more judgmental (versus nonjudgmental) forms of comparison (Festinger, 1954; Park & Baek, 2018).

16

Lee (2014) conducted a study that examined social comparison orientation, more specifically the frequency of social comparison, on Facebook. Lee's study found a positive correlation between frequency of Facebook use and negative feelings from comparison that related to feeling like others' lives were better and others were doing better than the comparer. Low self-esteem was determined to be a potential factor that contributed to the overall negative feeling of the comparer, as well as the comparers' frequency to engage in social comparison. Vogel et al. (2015) similarly found that individuals higher in social comparison orientation were more likely to use SNSs, specifically Facebook, more frequently than those low in social comparison orientation and were more invested in it. This study also found that people who have a higher social comparison orientation, when presented with others' Facebook profiles, were more likely to report lower self-esteem, lower self-perception, and lower affect. This result supports previous research that reveals that individuals higher in social comparison orientation are more likely to make active social comparisons when exposed to SNSs and then will internalize these social comparisons into the self (Buunk, Groothof, & Siero, 2007; Lee, 2014). With this information it can reasonably be hypothesized that the more time spent on SNSs, the more likely an individual will be higher in social comparison orientation.

Impact of Self-Esteem

Self-esteem is a widely known concept often defined as how individuals view themselves and their overall self-worth. The American Psychological Association (2018) adds to this definition by discussing qualities and characteristics an individual possesses and if those qualities or characteristics are perceived positively. Generally, the more positively people view themselves, the higher their self-esteem. Self-esteem is a heavily measured and researched area. In terms of SNSs, self-esteem has been increasingly measured, and linked to numerous negative outcomes (Andreassen, Pallesen, & Griffiths, 2017; Burrow & Rainone, 2017). One study found that chronic exposure to Facebook increased the chances of lower self-esteem in individuals (Vogel et al., 2014). Specifically, individuals who viewed SNS profiles with high activity and positive content reported lowered self-esteem and poorer self-evaluations. Depending on the level of an individual's self-esteem, the target that individuals compares themselves to may vary. Comparisons that take place on SNSs tend to be upward social comparisons, which may lead to a decrease in the user's overall self-esteem, especially the content to which users compare

themselves to is typically depictions of people living "perfect," happy lives. This perception leads users to a decrease in self-esteem and overall self-worth (Wang, Wang, Gaskin, & Hawk, 2017). Low self-esteem tends to magnify social comparison motives for individuals and makes them more sensitive to the personal nature of SNSs, such as Facebook (Cramer, Song, & Drent, 2016).

Relationship-contingent self-esteem (RCSE), based on contingent self-esteem (CSE), is a form of self-esteem that "depends on one's relationship and represents a particular kind of relationship investment" (Knee, Canevello, Bush, & Cook, 2008, p. 609). RCSE has been linked to lower reported self-esteem, wellbeing, and relationship satisfaction, due to the individual's tendency to take minor negative or positive relationship events and make them significant (Rodriguez, Wickham, Øverup, & Amspoker, 2016). Being higher or lower in RCSE may impact individual's sensitivity to comparable relationship content shared on SNSs. If one's RCSE is low, which would correlate with a lowered overall self-esteem, higher social comparison orientation, and lower relationship satisfaction, it can be hypothesized that individuals would have a higher tendency to compare themselves to other SNS users, especially those who share relationship oriented content. In other words, lower relationship-contingent self-esteem will correlate with higher social comparison orientation. Based on this research, it is thought that RCSE and relationship satisfaction will have a positive relationship, especially when engaging with relationship oriented content.

Impact of Relationship Satisfaction

Relationship satisfaction is a widely studied variable, but there are limited studies that focus on how relationship satisfaction is impacted by SNS use as well as social comparison orientation. The research regarding SNSs and relationship satisfaction has provided mixed results. One study found that individuals with increased relationship satisfaction tended to share more relationship-relevant content on Facebook (Saslow, Muise, Impett, & Dubin, 2013). Although this study did not necessarily take into account time spent on SNS sites, it shows that there is a correlation between relationship satisfaction and behaviors conducted on SNS sites. Elphinston and Noller (2011) described "Facebook intrusion," which is characterized by excessive Facebook use that gets in the way of romantic relationship functioning and daily functioning. Higher levels of Facebook intrusion were marked by relationship dissatisfaction, as well as experiences of

cognitive jealousy and surveillance behaviors which can support the notion that more frequent use of SNSs can contribute to experiences of lower relationship satisfaction (Elphinston & Noller, 2011). Buunk (2006) conducted a study on married couples who were asked to read an interview from another married couple. This study supported the notion that social comparison orientation and relationship satisfaction were connected. More specifically, those who scored higher in social comparison orientation and higher in relationship satisfaction were more likely to make positive comparisons with the identified married couple from the interview. This result is important because it highlights relationship satisfaction as a possible mediator for individuals high or low in social comparison orientation.

The new popular term "phubbing," a combination of the words "phone" and "snubbing," describes the phenomenon of individuals' excessive phone use when in the presence of other people, such as friends, family members, or romantic partners (which was dubbed "Pphubbing" for "partner phubbing") (Roberts & David, 2015). For young adults, phone use is often geared towards monitoring or participating on SNS sites. It can therefore be assumed that there is a connection between Pphubbing and SNS use. Pphubbing was linked to lower life satisfaction, depression, and relationship dissatisfaction (Vanden Abeele　Postma Nilseno　a　2018 . SNS use has also been linked to experiences of jealousy and low-self-esteem, which was affected by need for popularity, jealousy, and monitoring behavior (Utz & Buekeboom, 2011). SNSs provide ample opportunity for men and women to view content that is sexual in nature and also for less time to be spent on the relationship, especially depending on how much time each partner is spending on the SNS. Partnered with social comparison theory, SNSs are the perfect storm in eliciting opportunity to compare ourselves which can be further exacerbated by our individual socialization. Overall, the studies discussed provide useful insight into impacts on relationships with respect to ourselves and our partners, but there is limited research about the impact that viewing friends' or followers' SNS pages can have on the overall romantic relationship.

SNSs in relation to romantic relationships and relationship satisfaction have also been linked to social comparison theory, although sparingly. As discussed above, social comparison theory provides an understanding of how humans relate to others, and specifically with how humans perceive their own social standing in reference to others (Festinger, 1954). This self-evaluation can impact our sense of self, as well as our perception of our romantic relationships. Research has shown that individuals in a close romantic relationship tend to include their partner

in their self (Aron & McLaughlin-Volpe, 2001). Along with the idea that individuals make comparisons to engage in self-improvement, individuals in relationships may make relational comparisons for relationship evaluation and relationship improvement, as well as to increase satisfaction in one's own relationship. Social comparisons, as discussed previously, are categorized as upward comparisons or downward comparisons which can also be made in regard to romantic relationships. Morry (2011) found that couples within the first three months of their dating relationships make 9.64 comparisons versus 3.76 comparisons for couples in long-lasting relationships. These types of comparisons have been coined "relationship social comparisons." More research has been conducted on marital social comparisons (Buunk & Ybema, 2003) emphasizing a need to study relationship social comparisons that occur outside of marriage (e.g., in dating relationships).

Impact of Social Networking Sites

In the current research, social comparison and amount of time spent on SNSs has not been studied, but other mental health outcomes have. Self-esteem in relation to body image is often the focus of research using social comparison theory. Again, when many of our followers or friends on SNS sites are sharing content, especially content that depicts "best selves," it has been linked to lowered self-esteem and lowered body satisfaction (Tiggemann & Slater, 2014).

Most studies that focus on SNSs and social comparison use social comparison of ability versus social comparison of opinion to frame their work (Yang, Holden, Carter, & Webb, 2018). Social comparison of ability is a more judgmental, competition-based form of social comparison and is often associated with upward social comparisons. Social comparison of opinion tends to be nonjudgmental and information-based. When individuals engage in social comparison of ability they are more likely to view other individuals as competitors, even on SNS platforms.

SNSs affords individuals the opportunity to engage in more upward social comparisons, again due to the fact that most SNS users present content that presents positive self-representation that makes other users feel worse off than their peers. Yang et al. (2018) found that under certain circumstances social comparisons made through SNSs contributed to higher identity distress in college students and found other evidence that indicated SNSs and social comparison also contributed to experiences of depressive symptoms (Feinstein et al., 2013).

The Present Study

Based on the research reviewed above, it is clear that SNS use has been linked to multiple negative outcomes within the mental health field. Literature focusing on social comparison and SNSs (especially Facebook) has extensively been shown to impact an individual's overall wellbeing, both positively and negatively. Limited research has considered the time spent on SNS sites, unless associated with SNS addiction, especially when examining relationship satisfaction. This is important to understand, as SNS use is becoming more and more prevalent and has already been shown to impact individuals, so it can be hypothesized that there will be an impact on romantic relationships. In this present study, I investigated the relationship between daily SNS use, social comparison orientation, relationship contingent self-esteem, and relationship satisfaction.

Hypotheses

Based upon the literature reviewed above, I will test nine hypotheses, as seen in Figure 1 and Figure 2. Two models are being used, as SNS use is being operationalized in two ways. One way by looking at minutes spent on each SNS site and the other by looking at days a person spends posting about their romantic relationship.

Hypothesis #1: Time spent on specific social media will positively predict social comparison orientation.

Hypothesis #2: Time spent on specific social media will negatively predict relationship contingent self-esteem.

Hypothesis #3: Time spent on specific social media will negatively influence relationship satisfaction.

Hypothesis #4: Days spent posting about significant other on a specific social media will positively predict social comparison orientation.

Hypothesis #5: Days spent posting about significant other on a specific social media will negatively predict relationship contingent self-esteem.

Hypothesis #6: Days spent posting about significant other on a specific social media will negatively influence relationship satisfaction.

Hypothesis #7: Relationship social comparison and social comparison scale will negatively predict relationship satisfaction.

Hypothesis #8: Relationship contingent self-esteem will positively predict relationship satisfaction.

Hypothesis #9: There will be a negative relationship between relationship contingent self-esteem and relationship social comparison and social comparison scale.

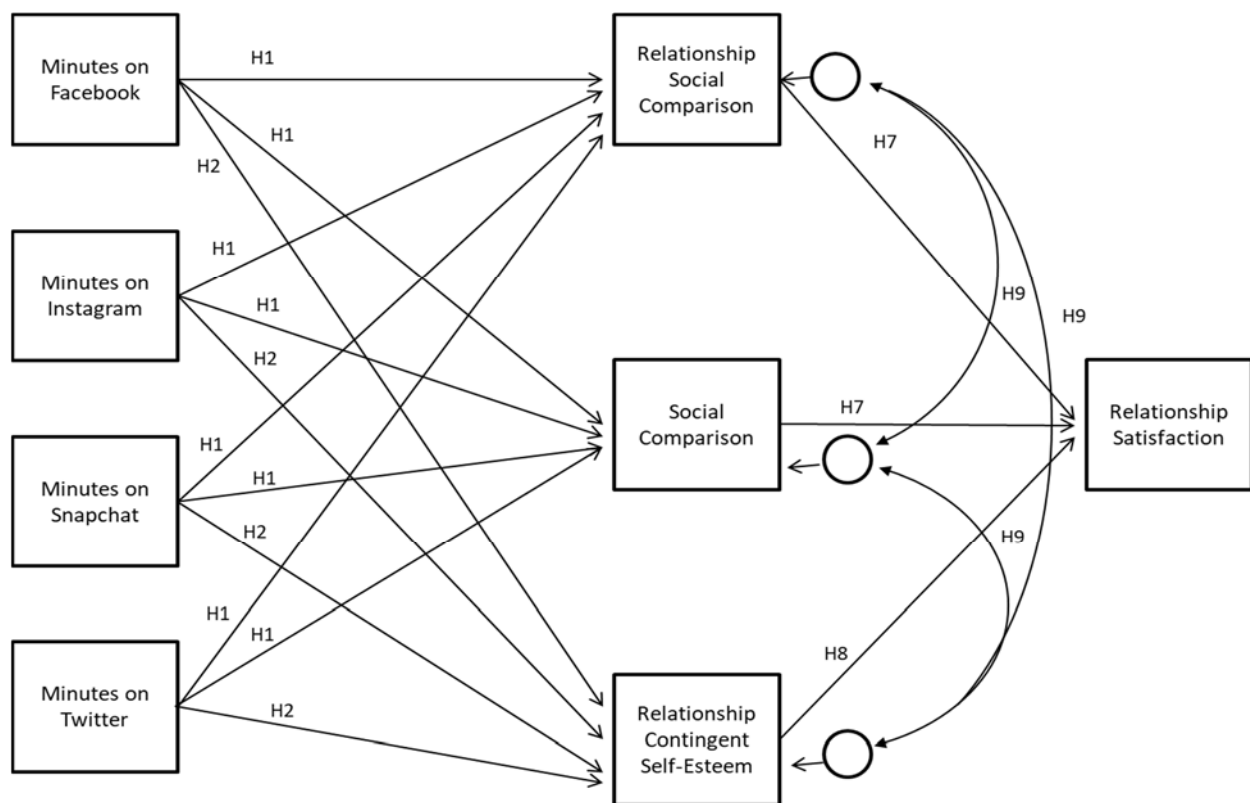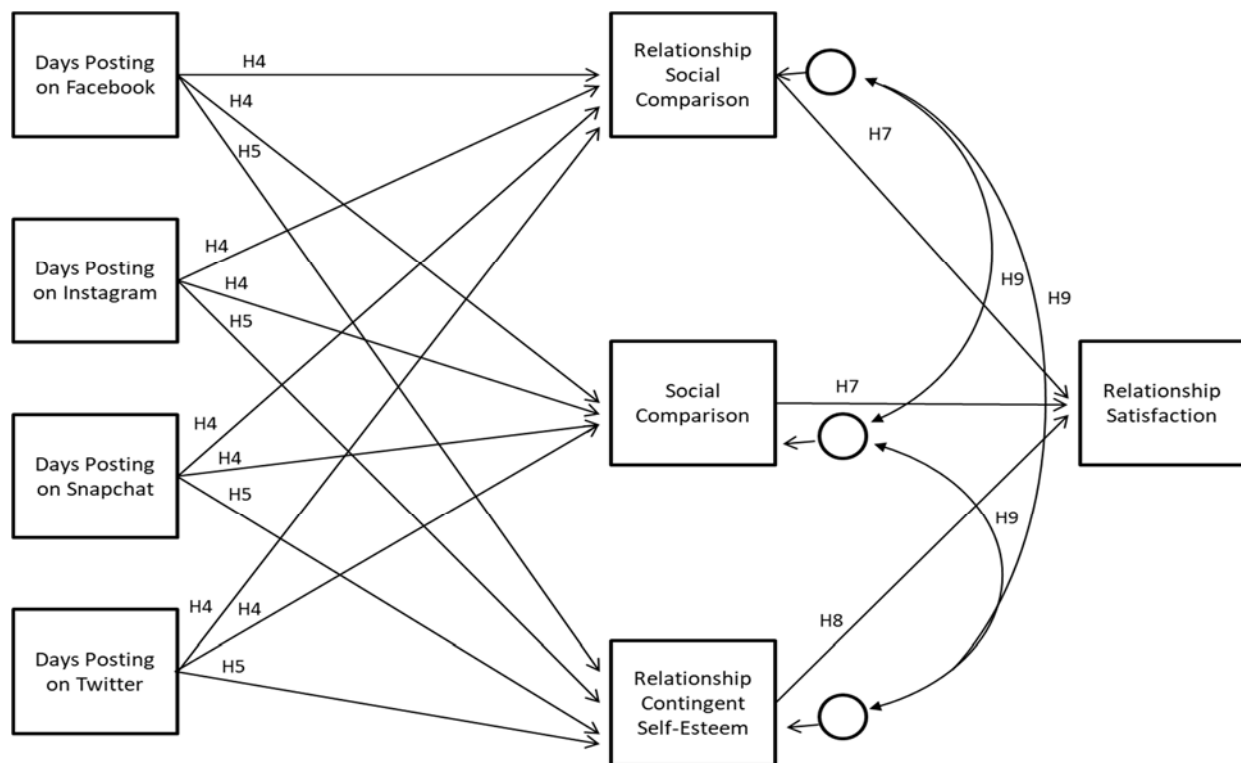igure 1. Proposed Structural Equation Model for Minutes on SNSs

igure 2. Proposed Structural Equation Model for Days Spent Posting about Relationship on SNSs

CHAPTER 3: METHODOLOGY

Participants and Procedure

A power analysis revealed that 190 respondents were needed for the structural equation modeling analysis (Wolf, Harrington, Clark, & Miller, 2013). Respondents were eligible if they were (1) 18 years of age or older, (2) in a heterosexual romantic, committed dating relationship for at least 6 months, but not more than 4 years, and (3) not married.

Following approval from Purdue University's Institutional Review Board (IRB), participants were recruited through the use of Amazon Mechanical Turk (MTurk), a crowdsourcing website. The online questionnaire (see Appendix B) was created using Qualtrics and was distributed through a link on MTurk. This questionnaire was anonymous (no personally revealing information was collected), with participants providing their consent prior to beginning the questionnaire. An incentive of $0.50 was given to participants who met the inclusion criteria.

A total of 1,441 accessed the survey via MTurk. 1,439 participants provided consent to participate in the survey, and 2 did not provide consent and were removed. Of the 1,439 participants who did consent, 658 participants reported being currently in a heterosexual, romantic relationship, 74 responded that they were not in a heterosexual, romantic relationship, and the remaining 709 participants did not respond. The 783 participants who responded "no" to the previous statement or did not answer were immediately dropped from any further analysis. After removing respondents who were missing systematic data (i.e. did not answer at least 75% of each scale), a total of $n = 235$ participants were included in the final analyses.

Part of this survey focused on various demographic information including age, race, gender, sexual orientation, relationship status, education level, geographic location, employment status, and income. Participants in this survey varied in age ranging from 19-30, with a mean age of 26.19 years and a standard deviation of 2.82. Most (68.8%) of the participants were male and the remaining 31.2% identified as female. Sexual orientation was also included in the demographic questions. A sizeable majority (86.0%) of the sample identified as straight/heterosexual, 13.6% identified as bisexual, and .5% identified as asexual.

In terms of race, 64.7% of the participants identified as White/Caucasian, 8.6% identified as Hispanic, 14.9% identified as Black/African American, 7.2% identified as Asian/Pacific Islander, 2.3% identified as Native American, 0.5% identified as Middle Eastern, 0.9% identified

as multiracial, and 0.9% identified as other. Participants were also asked questions regarding their relationship status. Of the sample, 69.7% were dating, 14.9% were cohabitating, 9.5% were engaged, 2.3% were widowed, 1.8% were divorced, and 1.8% were separated. In terms of length of relationship 40.7% of the sample reported being together between 1-2 years, 28.5% had been together for between 6-12 months, 20.4% reported being together between 2-3 years, and 10.4% reported being together between 3-4 years.

In terms of the state that participants live in, responses were divided into which region of the country they live in: West (CO, WY, MT, ID, WA, OR, UT, NV, CA, AK, and HI) Southwest (TX, OK, NM, and AZ), Midwest (OH, IN, MI, IL, MO, WI, MN, IA, KS, NE, ND, and SD), Southeast (WV, VA, KY, TN, NC, SC, GA, AL, MS, AR, LA, and FL), Northeast (ME, MA, RI, CT, NH, VT, NY, PA, NJ, DE, and MD). The West consisted of 22.2% of the sample, the Southwest consisted of 19.9%, the Midwest consisted of 12.2%, the Southeast consisted of 21.7%, and the Northeast consisted of 24.0% of the sample.

Lastly, in terms of highest level of education, employment status and income, a plurality of respondents reported as having a bachelor's degree (49.3%), were employed on a full-time basis (83.3%), and made an estimated $40,000-$49,000 (16.3%) per year before taxes.

Materials

Relationship Satisfaction

The Couples Satisfaction Index (CSI; Funk & Rogge, 2007) is a 32-, 16-, or 4-item instrument used to measure relationship satisfaction. In order to keep the questionnaire short and to maintain adequate reliability, I used the 16-item scale. For this study, participants were asked to examine their satisfaction in their own romantic relationship. Participants indicated their responses for the first item using a 7-point Likert scale ranging from 0 (*extremely unhappy*) to 6 (*perfect*). The rest of the items are scored on a 6-point Likert scale from 0 (*not at all*) to 5 (*completely*). The CSI has been shown to establish excellent internal consistency (Cronbach's alpha = .75) and strong convergent and construct validity. To score this assessment, item responses are summed based on the number selected. Scores range from 0 to 81, with higher scores indicating greater relationship satisfaction and scores below 51.5, suggesting relationship dissatisfaction.

Relationship Contingent Self Esteem

The Relationship-Contingent Self-Esteem Scale (Knee et al., 2008) included 11 items about thoughts and behaviors in committed relationships. Example items are, "My feelings of self-worth are based on how well things are going in my relationship," "When my partner and I fight, I feel bad about myself in general," and "I feel better about myself when it seems like my partner and I are emotionally connected." Responses were rated on a 5-point Likert-type scale (1 = *not at all like me* and 5 = *very much like me*). Scale scores are computed by averaging items responses. Higher scores indicate a greater tendency to base overall self-worth on one's romantic relationship. Cronbach's Alphas for this scale was .74.

Social Comparison Orientation

The Social Comparison Scale (Allan & Gilbert, 1995) is an 11-item semantic differential scale. Respondents will make global social comparisons of themselves in relation to others on 11 bipolar constructs, rated 1-10, measuring constructs of inferior-superior, attractive-unattractive, and insider-outsider. Low scores indicate relative inferiority compared with others, while high scores indicate relative superiority. Negative correlations with depression thus indicate that higher depression is associated with increasing inferiority (lower scores) (Gilbert & Procter, 2006). To compute scale scores, all items are added. A higher score indicates feelings of superiority and general high rank self-perceptions. This scale has been used in multiple studies (Allan & Gilbert, 1997; Gilbert & Allan, 1998) and had a good Cronbach's alpha of .94 for this study.

Relationship Social Comparison

The Relationship Social Comparison Measure (RSCM; Smith LeBeau & Buckingham, 2008) is a 24-item scale that assesses individual differences in tendencies to make relationship social comparisons by indicating how often the individual made each type of comparison. Each item is rated on a 5-interval scale (with response options of *never*, *rarely*, *sometimes*, *often*, and *always*). Example items are "I feel happy when I compare my relationship to others' relationships that are better than mine" and "I enjoy comparing my relationship to other couples' relationships." (Smith LeBeau & Buckingham, 2008). Scale scores are computed by summing all

responses. Higher scores indicate more frequent comparison behaviors. This measure had a Cronbach's alpha of .92 for this study.

Social Networking Site Use

To measure SNS use, questions will be asked regarding the estimated minutes that users believe they spend per day on several SNSs including Facebook, Instagram, Snapchat, and Twitter, as well as how often each user posts about their relationship on SNSs. A slider measure will be used on Qualtrics to allow users to more accurately estimate time spent on each SNS.

Social Desirability

To measure social desirability I used the Marlowe Crowne Social Desirability Scale, Form C, or MCSDS-C (Reynolds, 1982). It was constructed from the original 33-item measure in an effort to combat test-fatigue and increase reliability (this revised version showed a reliability of   .   Reynolds 1 82 and   alidity. This was pro en in the original development study, as well as in the numerous studies that have since followed (Desousa, Reeve, & Peterman, 2019; Flett, Nepon, Hewitt, Zaki-Azat, Rose, & Swiderski, 2019; Trub & Barbot, 2020). Several other short-forms of the original Marlowe-Crowne scale have been developed, but research has proven this 13-item short form to be the most viable, based both on reliability and validity (Desousa, Reeve, & Peterman, 2019; Hart, Richardson, & Breeden, 2020). The Marlowe-Crowne short form is a 13-item true or false questionnaire that consists of items such as "There have been occasions where I have taken advantage of someone," "I'm always willing to admit it when I make a mistake," and "I am always courteous, even to people who are disagreeable." For items 5, 7, 9, 10, and 13, 1 point is given for a "true" response and 0 points are given if there is a "False" response. For items 1, 2,3,4,6, 8, 11, and 12, 1 point is added for a response of "False" and 0 points are added for a response of "True." Respondents were given a score ranging from 0-13, with lower scores representing individuals who are less likely to answer questions in a socially desirable way, whereas higher scores indicate a potentially stronger tendency to answer questions based on social desirability. The Cronbach's alpha for this study was .63.

CHAPTER 4: RESULTS

Data Screening and Cleaning

A grand total of 1,441 participants accessed the survey on MTurk. Of these, 423 participants either did not consent to participate or were screened out due to exclusion criteria. Participants were removed if: 1) they did not consent, 2) were under 18 years of age or over 30 years of age, 3) did not identify as a cisgender male or female, and 4) were not heterosexual, bi-sexual, or asexual. A total of 783 respondents were removed because they were missing systematic data, meaning they were missing all data, and had stopped answering after the first question of the survey. This left a final sample size of n=235 suitable for initial data screening.

Variables were labeled appropriately and were adjusted to have the correct values labels and were set for scaling. No out-of-bounds data were found, as well as no unusual means or standard deviations. Univariate outliers were checked for by using Z-score analysis and found 7 cases, which were then dropped. The data were then examined for missing data. If missing data were present at less than 20%, I replaced the missing data with scale mean scores. Next, the data were examined for kurtosis and skewness. All of the items were in the acceptable range, within ±3 in skewness and ±6 in kurtosis, no item had both skewness and kurtosis at unacceptable levels. Next a scatterplot was visually examined, checking for linearity and homoscedasticity; both assumptions appear to have been met. Multivariate normality was examined using Mahalanobis value with Chi square critical value ($df = 4$, $p < .001$; critical value = 18.47), 7 items were outside of this range and were removed. With the 14 total cases removed during data screening a complete final sample of $n = 221$ was left for analysis.

Test of Hypotheses

A structural equation model was tested, using STATA 16 IC (StataCorp, 2019), to investigate the hypotheses that time spent on SNSs would have on self-esteem, social comparison orientation, and relationship satisfaction. I ran two structural equation models which are depicted in Figures 4.1 and 4.2. A table of correlations among the variables is depicted Table 4.1.

Due to the overlapping nature of the first set of variables (minutes spent on social networking sites and days spent posting about relationship on specific social networking sites) fit indices at typically evaluated significance levels to assess the model were not stringent enough. A $p < .001$ level was utilized to establish fit indices. For Model 1, minutes spent on SNSs, the independence model   24 .21 22, $N = 221$), $p = .000$, predicting no relationships among the model variables, fit well   14.8   4 $N = 221$), $p = .005$, $CFI = .952$, $SRMR = .04$. For Model 2, days spent posting about the relationship on SNSs, the independence model   20 .30 22, $N = 221$), $p = .000$, predicting no relationships among the model variables, fit well   12.   (4, $N = 221$), $p = .01$, $CFI = .952$, $SRMR = .03$.

Table 4.1 Correlation Among All Variables in Study

Observed Variable	1	2	3	4	5
1. CSI	1	--	--	--	--
2. RCSE	.319**	1	--	--	--
3. SCS	.267**	.194**	1	--	--
4. RCSM	-.215**	.091	.389**	1	--
5. SDS	.125	-.062	.124	-.213**	1

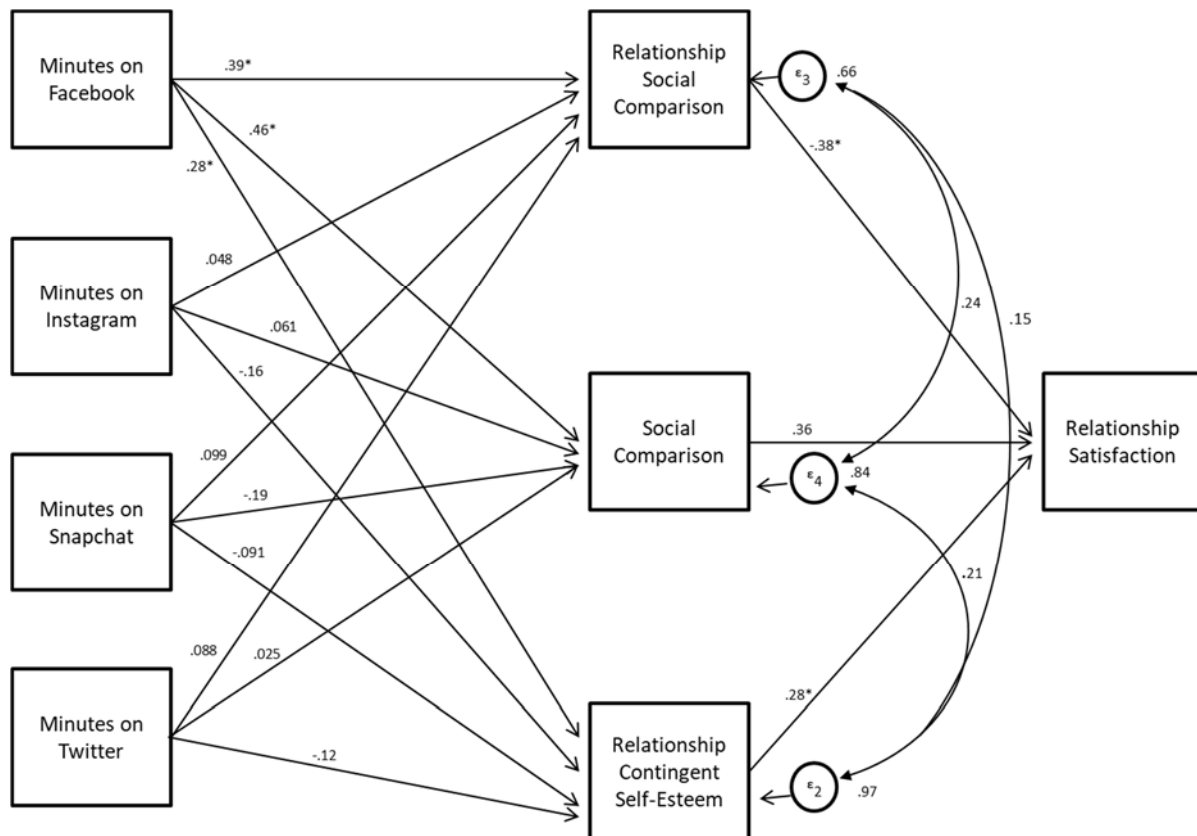*Note.* ** $p < .01$; * $p < .05$.

igure 4.1 Results of Proposed Structural Equation Model for Minutes on SNSs

Note.   *p*   .05.

Effects of SNS Use on Relational Variables

Hypothesis 1

Hypothesis 1 stated that time spent on specific social media will positively predict social comparison orientation. To assess this, participants reported minutes spent on each SNS (Facebook, Instagram, Snapchat, Twitter), which was compared to relationship social comparison and the social comparison scale total scores. This hypothesis was supported in the structural equation model. Instagram, Snapchat, and Twitter had no significant path to either relationship social comparison or social comparison variables. Facebook did have significant paths to both relationship social comparison and social comparison variables (Facebook → RSCM, $B = .39$, $p < .05$; Facebook → SCS, $B = .46$, $p < .05$).

Hypothesis 2

Hypothesis 2 stated that time spent on specific social media will negatively predict relationship contingent self-esteem. To assess this, participants reported minutes spent on each SNS (Facebook, Instagram, Snapchat, Twitter), which was compared to relationship contingent self-esteem total score. This hypothesis was supported in the structural equation model. Instagram, Snapchat, and Twitter had no significant path to relationship contingent self-esteem. Facebook had a significant path to relationship contingent self-esteem (Facebook → RCSE, $B = .28$, $p < .05$).

Hypothesis 3

Hypothesis 3 stated that time spent on specific social media will negatively influence relationship satisfaction. This hypothesis was tested with a Pearson correlation to determine the relationship between variables (See Table 4.1). There was a weak moderate, yet highly significant relationship between all SNSs and the CSI total score (Facebook & CSI, $r = -.211$, $p < .01$; Instagram & CSI, $r = -.217$, $p < .01$; Snapchat & CSI, $r = -.296$, $p < .01$; Twitter & CSI, $r = -.175$, $p < .01$). This indicates as time spent on each SNS increased, relationship satisfaction as reported by the CSI decreased, which supported this hypothesis. See Table 4.2.

Table 4.2 Correlation of Daily Minutes Spent on Social Networking Sites and Relationship Satisfaction

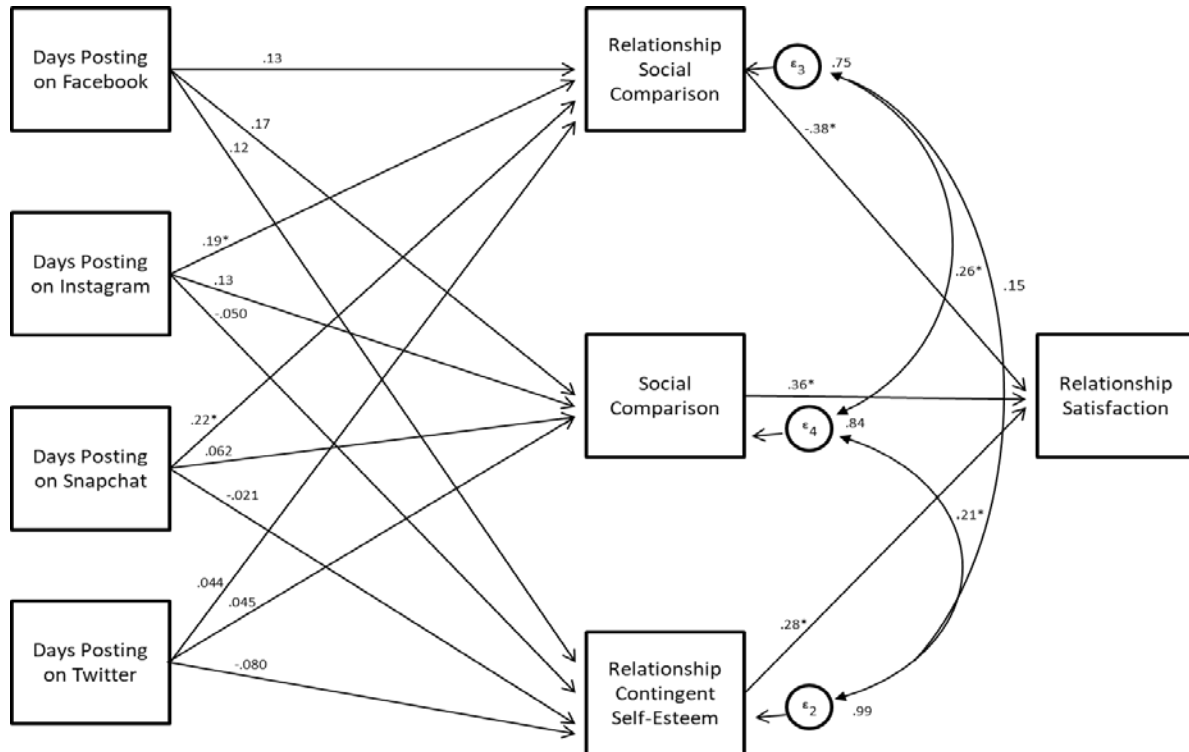| Observed Variable	1	2	3	4	5
1. Relationship Satisfaction	1	--	--	--	--
2. Minutes on Facebook	-.211**	1	--	--	--
3. Minutes on Instagram	-.217**	.832**	1	--	--
4. Minutes on Snapchat	-.296**	.770**	.779**	1	--
5. Minutes on Twitter	-.175**	.792**	.790**	.751**	1

Note. ** $p < .01$.

Figure 4.2 Results of Proposed Structural Equation Model for Days Spent Posting about Relationship on SNSs

Note. A number with * indicates a significant relationship at $p < .05$.

Effects of Days Spent Posting About Partner On Relational Variables

Hypothesis 4

Hypothesis 4 stated that days spent posting about a significant other on a specific SNS will positively predict social comparison orientation. To assess this, participants reported days spent posting about their relationship on each SNS (Facebook, Instagram, Snapchat, Twitter), which was compared to relationship social comparison and the social comparison scale total scores. This hypothesis was supported in the structural equation model. Facebook and Twitter had no significant path to either relationship social comparison or social comparison variables. Instagram and Snapchat did have a significant path to relationship social comparison, but not the other social comparison orientation variable (Instagram -> RSCM, B = .19, p < .05; Snapchat -> RSCM, B = .22, p < .05).

Hypothesis 5

Hypothesis 5 stated that days spent posting about significant other on a specific social media will negatively predict relationship contingent self-esteem. To assess this, participants reported days spent posting about their relationship on each SNS (Facebook, Instagram, Snapchat, Twitter), which was compared to relationship contingent self-esteem total score. Facebook, Instagram, Snapchat, and Twitter had no significant path to relationship contingent self-esteem. This hypothesis was not supported in the structural equation model.

Hypothesis 6

Hypothesis 6 stated that days spent posting about significant other on a specific social networking site will negatively influence relationship satisfaction. This hypothesis was tested with a Pearson Correlation to determine the relationship between variables (See Table 4.2). There were weak significant relationships between Facebook, Instagram, and Snapchat and the CSI total score (Facebook & CSI, r = -.138, p < .05; Instagram & CSI, r = -.140, p < .05; Snapchat & CSI, r = -.230, p < .05). There was no significant relationship between days posting on Twitter about the relationship and CSI total scores (r = -.088, p > .05). This indicates as days

spent posting about the relationship on each SNS increased, relationship satisfaction as reported by the CSI decreased, which supported this hypothesis. See Table 4.3.

Table 4.3 Correlation of Days Spent Posting About the Relationship on Social Networking Sites and Relationship Satisfaction

Observed Variable	1	2	3	4	5
1. Relationship Satisfaction	1	--	--	--	--
2. Days Posting Facebook	-.138*	1	--	--	--
3. Days Posting Instagram	-.140*	.730**	1	--	--
4. Days Posting Snapchat	-.230**	.567**	.605**	1	--
5. Days Posting Twitter	-.088	.568**	.642**	-.633**	1

Note. ** $p < .01$; * $p < .05$.

Relationship Between Social Comparison Orientation, RCSE, and Relationship Satisfaction

Hypothesis 7

Hypothesis 7 stated that social comparison orientation will negatively predict relationship satisfaction. To assess this, social comparison orientation variables (RSCM & SCS) were compared to relationship satisfaction (CSI). This hypothesis was partially supported in the structural equation model (See Figure 4.1). RSCM had a significant negative path to relationship satisfaction (B = -.38, $p < .05$) as predicted in the hypothesis. SCS had a significant positive path to the relationship satisfaction variable which was not predicted in the hypothesis and so does not support this hypothesis.

Hypothesis 8

Hypothesis 8 stated that relationship contingent self-esteem will positively predict relationship satisfaction. To assess this, RCSE was compared to relationship satisfaction (CSI). This hypothesis was supported in the structural equation model (See Figure 4.1). RCSE had a

positive significant path to relationship satisfaction (B = .28, $p < .05$). This indicates that the higher a score is on the RCSE, the more it influences the CSI total score in a positive manner.

Hypothesis 9

Hypothesis 9 stated that there will be a negative relationship between relationship contingent self-esteem and social comparison orientation. To assess this, social comparison orientation variables (RSCM & SCS) were compared to RCSE. This hypothesis was not supported in the structural equation model (See Figure 4.1). The variables had significant positive relationships, whereas the hypothesis stated that there would be a negative relationship.

CHAPTER 5: DISCUSSION

The purpose of this study was to examine the relationships among SNS use, relationship contingent self-esteem, social comparison orientation and relationship satisfaction. Prior research did not include time spent on SNSs as a factor or days spent posting about the relationship on SNSs, specifically when looking at relationship satisfaction. This study may provide insight into how SNSs impact relationships in today's society, especially as SNS use is so prevalent in current culture and has shown significant impacts on varying mental health outcomes. This study was also able to shed light on which specific SNS sites (Facebook, Instagram, Twitter, and Snapchat) may be playing critical roles in dating relationships.

A majority of the hypotheses were supported, some partially, which shows that time spent on SNSs and how often we post about our relationship does in fact impact individuals in dating relationships. This supports previous research which focused on SNS use and its impacts on relationship satisfaction (Elphinston & Noller, 2011), self-esteem (Vogel et al., 2014), and social comparison orientation (Lee, 2014), and also helps to address gaps in the literature that did not focus on time spent on SNSs or days spent posting about the relationship on SNSs.

Time Spent on SNSs, Social Comparison Orientation, Relationship Contingent Self-Esteem, & Relationship Satisfaction

The first three hypotheses focused on how time spent, specifically minutes spent, on SNSs impacted an individual's social comparison orientation, relationship contingent self-esteem, and their overall sense of relationship satisfaction. In terms of social comparison orientation, there was a significant relationship between time spent on Facebook and higher reported social comparison orientation. This finding supports previous research in that researchers had previously established a link between users engaging with Facebook and perceiving that other users were "happier" or better off than they were, which is connected to a higher social comparison orientation (Chou & Edge, 2012). Instagram, Snapchat, and Twitter did not yield significant results, potentially due to the fact that more people tend to use Facebook, as well as there is more varied content to be shared on Facebook than these other SNS platforms. Most research conducted outside of this study had a heavy focus on Facebook use-specific outcomes. Again, this may be due to the fact that Facebook is quite a bit more popular than the

other three SNS platforms, but it also may be due to the differences in use of Facebook. Subjectively, Facebook provides a platform for more varied content to be shared (i.e. posts, sharing pictures or videos, direct messaging, and so on). With that being said, Facebook may present the most opportunity for individual users to engage in social comparison behaviors.

Hypothesis two found that increased time spent on SNSs negatively impacted participants reported RCSE, but only through Facebook. The other three SNS platforms did not have a significant relationship. Studies in the past have provided mixed results on impact of SNS use on overall self-esteem and limited studies had explored specifically RCSE in relation to SNS use. Vogel et al. (2014) had conducted research, discussed previously, that had examined Facebook use and its impact on self-esteem. The results from this study complement previous results in the sense that more time spent on Facebook led to lower reported RCSE. Low self-esteem has also been reported to bear impact on social comparison orientation, in that lower self-esteem may make a SNS user more susceptible to making upward social comparisons. Much of the content posted on SNSs reflects happy individuals, couples, families, and so on. People with low self-esteem who are increasingly subjected to such content, it may feel less than their online peers (Cramer, Song, & Drent, 2016).

There was a significant relationship between increased time spent on all reported SNSs and lower reported relationship satisfaction. There is extremely limited research on impacts of Twitter, Snapchat, and Instagram on relationship satisfaction, so this study will hopefully provide insight into how they impact this specific variable, or at a very minimum show there is an impact in multiple SNS platforms, not just Facebook. In terms of Facebook, this study was consistent with other studies who had only analyzed relationship satisfaction and Facebook. Previous studies had found that increased time on Facebook led to decreased relationship satisfaction in a romantic relationship. The rationale for these results can be understood in comparison to previous research (Roberts & David, 2016) in the sense that when a partner is engaging more often with an SNS platform, it usually means the partner is spending less time and attention on their romantic relationship.

Days Spent Posting on SNSs, Social Comparison Orientation, RCSE, & Relationship Satisfaction

Hypotheses four through six focused on the same variables as the first three hypotheses, but instead of using time spent on SNSs, days spent posting about one's significant other was used. These three hypotheses were met with varying results. Again, there is limited research focused on how days spent posting about one's partner on SNSs impacts these three variables. When looking at the days spent posting on Facebook and Twitter regarding a partner and social comparison orientation, there were no significant results. As for Instagram and Snapchat, there was a significant path from both of these SNSs to the RSCM.

The hypothesis regarding days spent posting on SNSs regarding the individuals relationship and the RCSE variable did not yield any significant results. This result contradicts previous research that a study had found that the more a partner shared content related to their partner on Facebook, the higher the reported relationship satisfaction (Saslow, Muise, Impett, & Dubin, 2013). Studies have shown that there tends to be a significant relationship between RCSE and relationship satisfaction, so it can be assumed that based on that study, the participants who had reported higher relationship satisfaction may have also scored higher in RCSE. There may be varying reasons as to why the data were not significant. Individuals tend to vary in how often they post on SNSs in general. The age demographic of this sample as well may have an impact on this specific variable. The limited prior research makes it difficult to understand these results or give context to these results.

Hypothesis six, which analyzed the relationship between days spent posting about the relationship and relationship satisfaction was supported by all SNSs except for Twitter. The relationship between this variable and Twitter was negative meaning that the more someone would post about their partner or relationship would lead to a decrease in relationship satisfaction. Experience gives some understanding to these results as people tend to post content that is "happier" even if it is not a true reflection of the relationship. So, if an individual is posting more often about their relationship then they may be trying to portray their relationship in a certain way that leads others to believe they are happy. This does contradict a previous study that was previously discussed regarding sharing relationship related content and relationship satisfaction (Saslow, Muise, Impett, & Dubin, 2013). Social comparison theory understands human behavior in the sense that we base our self-view and status based on approval

from others and comparing ourselves to others. A possible explanation for this result is that people may post content related to their partner and relationship to garner positive attention and approval from peers.

Social Comparison Orientation & Relationship Satisfaction

Hypotheses eight focused on the relationship between social comparison orientation and relationship satisfaction. The hypothesis predicted a negative relationship between the two variables, which was partially supported. RSCM and SCS were both used for the social comparison orientation variable. The hypothesis was only supported between RSCM and relationship satisfaction. This means that the more people compare their relationship to others, the less their reported relationship satisfaction. This finding supports previous research that had found that relationship social comparison tendencies were related to lowered relationship security (Smith LeBeau & Buckingham, 2008). As discussed earlier, many online social comparisons that are made are upward, meaning that people often compare themselves to people who they perceive are better than they are. If an individual is comparing their relationship online to someone who they perceive has a better relationship, it may make them more apt to feel dissatisfied in their relationship.

RCSE and Relationship Satisfaction

The hypothesis regarding RCSE and relationship satisfaction was supported, which is consistent with previous research. It is understandable that the better individuals perceive their relationship to be, the higher in self-esteem they will feel based off of their relationship. RCSE can potentially act as a protective factor when discussing SNS use. If someone feels confident in their relationship they may not be as inclined to make comparisons in their relationship, or if they do, they may make more downward social comparisons.

RCSE and Social Comparison Orientation

The hypothesis related to RCSE and social comparison orientation was not supported. This may be due to the fact that RCSE, but not general self-esteem, was measured. Previous

studies had found negative relationships between social comparison orientation and self-esteem, but not specifically RCSE. Future studies may want to include a measure of general self-esteem.

Limitations

This study mainly focused on how much time users spend on the different SNS sites and impacts on the different variables and did not explore specifically how users spend their time or what they are posting or viewing. Being able to understand individual user's motives for using SNS sites would add a qualitative component to this study, not just quantitative. There is such a diverse array of content on SNSs that, although this study provides insight into how amount of time impacts relationship satisfaction, RCSE, and social comparison orientation, it does not provide understating as to what the users are viewing or sharing that is impacting these variables and overall results.

One of the limitations to this study was the exclusion of non-heterosexual romantic relationships, including relationships in which the participant was not cis-gendered. If participants identified as gay or lesbian, they were excluded from the survey. This study also did not include those who identified as trans, intersex, or genderqueer. If a participant identified as one of these several identities, they were not included in the overall data analyses. Future research may want to consider including these identities to shine light on how a study of this nature impacts LGBTQ+ relationships.

Another limitation in this study was the large percentage of male respondents as 68.8% of the population identified as male. This disproportionate rate of varied gender responses may impact the overall data set, which could have impacted results from data analyses. Although there was not a specific emphasis on gender for this study, future research may consider gaining a more equal data set in terms of male and female responses and run separate studies on how gender impacts the overall results.

The Marlowe Crowne Social Desirability Scale that was used also presents as a limitation for this study. The Cronbach's Alpha was 0.63 which is below the acceptable level. This is in part due to the structure of the scale; the only options were "True" or "False" which tends to affect the overall reliability and validity. The short form was used in order to keep the questionnaire short to increase user response, but using the short form may have also impacted the lack of significance or relationships between this scale and other scales.

Lastly, age, relationship status, and length of relationship count towards limitations of this study. Participants had to be between 18-30 years old, in a dating, non-married relationship, and in their relationship for more than 6 months, but less than 4 years. Participants who indicated age, relationship status, or length of relationship outside of these guidelines were dropped from data analyses. These limitations may impact the overall results of this study, as males and females tend to differ in reported self-esteem and may view factors that contribute to relationship satisfaction differently, and maybe even social comparison orientation. Along these lines, being more inclusive of LGBTQIA relationships in this study may impact the results, as these couples tend to face more adversity due to different social constructs in the United States, as well as across the world, and this may impact results relating to relationship satisfaction, RCSE, and social comparison orientation. In terms of age, it would be interesting to include people from wider age ranges because the different age populations tend to use SNSs at different frequencies, and may even have different motives for using SNSs. Future research may want to focus on how each type of relationship, not just dating or cohabitating relationships are impacted from SNS use, specifically married relationships, as well as how length of relationship may impact the results.

Clinical and Theoretical Implications

The present study may hold implications for clinicians work with couples, individuals, and even families. There was evidence that increased time spent on SNSs impacted the different variables, specifically relationship satisfaction. Clinicians should include questions regarding SNS use to see how clients, whether individual, couple, or family, interact with SNSs and explore how SNS use impacts various relationships in the client's lives. Clinicians may also want to assess clients' tendencies to compare themselves to others, specifically incorporating assessments on self-esteem. Although the results indicated that individuals experience higher self-rated relationship contingent self-esteem when they exhibit higher social comparison orientation, it is still important to understand how clients may make social comparisons and understand on the individual level how those upward or downward comparisons contribute to the client's presenting problem or story.

Clinicians should especially take stock of their clients' tendencies to engage on SNSs and how much specific time the client is spending on various SNSs. The results of this study show

that time spent on SNSs, even if it is just Facebook, does impact relationship satisfaction. Being able to ask clients how their time spent on SNSs impacts their daily lives can be an important element of treatment. Although this study did not focus on it, internet addiction can also be assessed as it ties in to the results of this study. If a client is reporting SNS use to be a problem, it is essential to explore options with the client to limit SNS time and redirect that time into something more beneficial, such as the individual's relationship.

With the spread of COVID-19 happening around the world, there is no doubt that SNS use will increase, as well as the need for therapy either during or after the pandemic. From a subjective perspective, it has been seen that this pandemic is bringing people together in order to "flatten the curve." There has also been an increase in people sharing content related to having someone (a significant other, husband, wife, or partner) during this situation. This influx of content related to COVID-19 may impact SNS users' mental health relating to self-esteem, relationship satisfaction, and social comparison orientation. A lot of the content that is being shared may provoke fear or concern for physical safety, emotional safety, and financial security. Clinicians now and in the future should be assessing the impacts of this situation on clients and how it has impacted them systemically. It is also important for clinicians to engage in discussions related to what clients witnessed on SNSs during this time and how it has impacted their relationship(s) and sense of self.

Conclusion

The present study found that increased time spent on SNSs, specifically Facebook, negatively impact relationship satisfaction, negatively impact RCSE, and positively impact social comparison orientation. This study also found that the number of days individuals post about their relationship on SNSs positively predicted social comparison orientation; did not impact RCSE; and negatively impacted relationship satisfaction, but only when looking at Facebook, Instagram, and Snapchat. These findings demonstrate the importance of understanding SNSs in the clinical context. Clinicians should be aware and actively assess their client's time spent on SNSs and if the clients have a higher or lower social comparison orientation. Although not all hypotheses were supported, or were only partially supported, this study gives insight into the impacts SNS use has on individuals in society and their relationships with their partners.

REFERENCES

Allan, S. & Gilbert, P. (1995). A social comparison scale: Psychometric properties and relationship to psychopathology. *Personality and Individual Differences*, *19*, 293-299.

Allan, S. & Gilbert, P. (1997). Submissive behaviour and psychopathology. *British Journal of Clinical Psychology*, *36*, 467-488

American Psychological Association. (2018). *APA dictionary of psychology*. Retrieved from https://dictionary.apa.org/self-esteem.

Andreassen, C., Pallesen, S., & Griffiths, M. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors, 64*, 287-293.

Armstrong, L., Phillips, J.G., & Saling, L.L. (2000). Potential determinants of heavier internet usage. *International Journal of Human–Computer Studies 53*, 537–550.

Aron, A. & McLaughlin-Volpe, T. (2001). Including Others in the Self. In C. Sedikides & M. Brewer (Eds.) *Individual Self, Relational Self, Collective Self.* (pp. 89-104). Ann Arbor, MI: Psychology Press.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, N.J: Prentice Hall.

Blackwell, D., Leaman, C., Tramposch, R., Osborne, C., & Liss, M. (2017). Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use and addiction. *Personality and Individual Differences*, *116*, 69-72.

Burnette, C., Kwitowski, M., & Mazzeo, S. (2017). "I don't need people to tell me I'm pretty on social media:" A qualitative study of social media and body image in early adolescent girls. *Body Image, 23*, 114-125.

Burrow, A. & Rainone, N. (2017). How many likes did I get?: Purpose moderates links between positive social media feedback and self-esteem. *Journal of Experimental Social Psychology, 69*, 232-236.

Buunk, A. P., Dijkstra, P., Bosch, Z. A., Dijkstra, A., & Barelds, D. P.H. (2012). Social comparison orientation as related to two types of closeness. *Journal of Research in Personality, 46*, 279-285.

Buunk, A. P., Groothof, H. A. K., & Siero, F. W. (2007). Social comparison and satisfaction with one's social life. *Journal of Social and Personal Relationships*, *24*, 197-205.

Buunk, B. P., & Ybema, J. F. (2003). Feeling bad, but satisfied: The effects of upward and downward comparison upon mood and marital satisfaction. *British Journal of Social Psychology*, *42*, 613–628. doi:10.1348/014466603322595301

Chou, H.T. G., & Edge, N. (2012). "They are happier and having better lives than I am": The impact of using Facebook on perceptions of others' lives. *Cyberpsychology, Behavior, and Social Networking*, *15*, 117–121. doi:10.1089/cyber.2011.0324

Cramer, E., Song, H., & Drent, A. (2016). Social comparison on Facebook: Motivation, affective consequences, self-esteem, and Facebook fatigue. *Computers in Human Behavior,64*, 739-746.

de Vries, D., & Kühne, R. (2015). Facebook and self-perception: Individual susceptibility to negative social comparison on Facebook. *Personality and Individual Differences, 86*, 217-221.

Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, *13*, 210-230. http://dx.doi.org/10.1111/j.1083-6101.2007.00393.x.

Elphinston, R., & Noller, P. (2011). Time to face it! Facebook intrusion and the implications for romantic jealousy and relationship satisfaction. *Cyberpsychology, Behavior and Social Networking, 14*, 631-635.

Feinstein, B., Hershenberg, R., Bhatia, V., Latack, J., Meuwly, N., & Davila, J. (2013). Negative social comparison on Facebook and depressive symptoms: Rumination as a mechanism. *Psychology of Popular Media Culture, 2*, 161-170.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*, 117-140. https://doi.org/10.1177/001872675400700202

Fox, J., Osborn, J., & Warber, K. (2014). Relational dialectics and social networking sites: The role of Facebook in romantic relationship escalation, maintenance, conflict, and dissolution. *Computers in Human Behavior, 35*, 527-534.

Funk, J., & Rogge, R. (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. *Journal of Family Psychology, 21*, 572-583.

Gilbert, P. & Allan, S. (1998). The role of defeat and entrapment (arrested flight) in depression: An exploration of an evolutionary view. *Psychological Medicine*, *28*, 585-598.

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self criticism   er iew and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy, 13*, 353-379.

Hawi, N., & Samaha, M. (2017). The relations among social media addiction, self-esteem, and life satisfaction in university students. *Social Science Computer Review,35*, 576-586.

Howard, J. (2018). What's the age when kids start social media? Retrieved from https://www.cnn.com/2018/06/22/health/social-media-for-kids-parent-curve/index.html.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! the challenges and opportunities of social media. *Business Horizons*, *53*, 59-68. http://dx.doi.org/10.1016/j.bushor.2009.09.003.

Kim, J., & Chock, T. (2015). Body image 2.0: Associations between social grooming on Facebook and body image concerns. *Computers in Human Behavior, 48*, 331-339.

Knee, C. R., Canevello, A., Bush, A. L., & Cook, A. (2008). Relationship-contingent self-esteem and the ups and downs of romantic relationships. *Journal of Personality and Social Psychology*, *95*, 608–627. https://doi.org/10.1037/0022-3514.95.3.608

Lee, S. (2014). How do people compare themselves with others on social network sites?: The case of Facebook. *Computers in Human Behavior, 32*, 253-260.

Marsh, H. W., & Parker, J. W. (1984). Determinants of student self-concept: Is it better to be a relatively large fish in a small pond even if you don't learn to swim as well? *Journal of Personality and Social Psychology*, *47*, 213–231. doi:10.1037/ 0022-3514.47.1.213

Masters, J. (1972). Effects of social comparison upon the imitation of neutral and altruistic behaviors by young children. *Child Development, 43*, 131-142.

Morry, M. M. (2011). *How are we doing? It depends on who I compare to and my anxiety level*. Poster presented at the Society of Personality and Social Psychology Conference, San Antonio, TX.

Morry, M., & Sucharyna, T. (2016). Relationship social comparison interpretations and dating relationship quality, behaviors, and mood. *Personal Relationships, 23*, 554-576.

Morry, M., Sucharyna, T., & Petty, S. (2018). Relationship social comparisons: Your Facebook page affects my relationship and personal well-being. *Computers in Human Behavior, 83*, 140-167.

Mussweiler, T., Rüter, K., & Epstude, K. (2004). The ups and downs of social comparison: mechanisms of assimilation and contrast. *Journal of Personality and Social Psychology, 87*, 832-844.

Nadkarni, A. & Hofmann, S.G. (2012). Why do people use Facebook? *Personality and Individual Differences, 52*, 243-249.

Niemz, K., Griffiths, M., & Banyard, P. (2005). Prevalence of pathological internet use among university students and correlations with self-esteem, the general health questionnaire (GHQ), and disinhibition. *Cyberpsychology & Behavior: The Impact of the Internet, Multimedia and Virtual Reality on Behavior and Society, 8*, 562-570.

Park, S., & Baek, Y. (2018). Two faces of social comparison on Facebook: The interplay between social comparison orientation, emotions, and psychological well-being. *Computers in Human Behavior*, *79*, 83-93.

Pew Research Center. (2019a). *Demographics of social media users and adoption in the united states.* Retrieved from https://www.pewinternet.org/fact-sheet/social-media/

Pew Research Center. (2019b). *Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018*. Retrieved from https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/

Pyszczynski, T., Greenberg, J., & LaPrelle, J. (1985). Social comparison after success and failure: Biased search for information consistent with a self-serving conclusion. *Journal of Experimental Social Psychology*, *21*, 195–211. doi:10.1016/ 0022-1031(85)90015-0

Roberts, J., & David, M. (2016). My life has become a major distraction from my cell phone: Partner phubbing and relationship satisfaction among romantic partners. *Computers in Human Behavior, 54*, 134-141.

Rodriguez, L., Knee, C., & Neighbors, C. (2014). Relationships can drive some to drink: Relationship-contingent self-esteem and drinking problems. *Journal of Social and Personal Relationships, 31*, 270-290.

Rodriguez, L., Wickham, R., Øverup, C., & Amspoker, A. (2016). Past and present, day by day: Communication with former romantic partners, relationship-contingent self-esteem, and current relationship outcomes. *Journal of Research in Personality, 65*, 62-67.

Rus, H., & Tiemensma, J. (2017). "It's complicated." A systematic review of associations between social network site use and romantic relationships. *Computers in Human Behavior, 75*, 684-703.

Saslow, L., Muise, A., Impett, E., & Dubin, M. (2013). Can you see how happy we are? Facebook Images and Relationship Satisfaction. *Social Psychological and Personality Science, 4*, 411-418.

StataCorp. (2019). *Stata Statistical Software: Release 16*. College Station, TX: StataCorp LLC.

Smith Lebeau, L., & Buckingham, J. (2008). Relationship social comparison tendencies, insecurity, and perceived relationship quality. *Journal of Social and Personal Relationships, 25*, 71-86.

Stapleton, P., Luiz, G., & Chatwin, H. (2017). Generation validation: The role of social comparison in use of Instagram among emerging adults. *Cyberpsychology, Behavior and Social Networking, 20*, 142-149.

Statista (2018). *Global time spent on social media daily 2018*. Retrieved from https://www.statista.com/statistics/433871/daily-social-media-usage-worldwide/.

Tiggemann, M., & Slater, A. (2014). NetTweens: The internet and body image concerns in preteenage girls. *The Journal of Early Adolescence, 34*, 606-620.

Toma, C.L. & Hancock, J.T. (2013). Self-affirmation underlies Facebook use. *Personality and Social Psychology Bulletin*, *39*, 321-331.

Utz, S., & Beukeboom, C. (2011). The role of social network sites in romantic relationships: Effects on jealousy and relationship happiness. *Journal of Computer-Mediated Communication, 16*, 511-527.

Vanden Abeele M. M. P.   Postma Nilseno a M. 2018 . More than ust ga e An e perimental ignette study e amining how phone ga ing and newspaper ga ing and phubbing while speaking and phubbing while listening compare in their effect on affiliation. *Communication Research Reports*, *35*, 303– 313. https://doi.org/10.1080/08824096.2018.1492911

Vogel, E., Rose, J., Roberts, L., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture, 3*, 206-222.

Vogel, E., Rose, J., Okdie, B., Eckles, K., & Franz, B. (2015). Who compares and despairs? The effect of social comparison orientation on social media use and its outcomes. *Personality and Individual Differences, 86*, 249-256.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* Cambridge, MA.: Harvard University Press.

Wang, J. L., Wang, H. Z., Gaskin, J., & Hawk, S. (2017). The mediating roles of upward social comparison and self-esteem and the moderating role of social comparison orientation in the association between social networking site usage and subjective well-being. *Frontiers in Psychology, 8*, 771-779. https://doi.org/10.3389/fpsyg.2017.00771.

Wiederman, M., & Allgeier, E. (1993). Gender differences in sexual jealousy: Adaptionist or social learning explanation? *Ethology and Sociobiology, 14*, 115-140.

Wolf, E., Harrington, K., Clark, S., & Miller, M. (2013). Sample size requirements for structural equation models: An evaluation of power, bias, and solution propriety. *Educational and Psychological Measurement, 73*, 913-934.

Yang, C., Holden, S., & Carter, M. (2018). Social media social comparison of ability (but not opinion) predicts lower identity clarity: identity processing style as a mediator. *Journal of Youth and Adolescence, 47*, 2114-2128.

Yang, C., Holden, S., Carter, M., & Webb, J. (2018). Social media social comparison and identity distress at the college transition: A dual-path model. *Journal of Adolescence, 69*, 92-102.

APPENDIX A. INFORMED CONSENT

RESEARCH PARTICIPANT CONSENT FORM

Study of SNSs, Relationship Satisfaction, Self-Esteem, and Social Comparison Orientation

David P. Nalbone, PhD, and Kaitlyn Gantz, BA

Dept. of Behavioral Sciences, Purdue University Northwest

<u>Key Information</u>

Please take the time to review this information carefully. This is a research study. Your participation in this study is voluntary which means that you may choose not to participate at any time without penalty or loss of benefits to which you are otherwise entitled. You may ask questions of the researchers about the study whenever you would like. If you decide to take part in the study, you will be asked to sign this form, so be sure to understand what you will do and any possible risks or benefits.

<u>What is the purpose of this study?</u>

You are being asked to participate in a study designed by Kaitlyn Gantz of Purdue University Northwest. We want to understand how time spent on social networking sites will impact social comparison orientation, self-esteem, and relationship satisfaction with romantic partners.

<u>What will I do if I choose to be in this study?</u>

If you choose to participate, you acknowledge that you are between 18 and 30 years old and are a US citizen. You acknowledge that you are currently or were previously involved in a heterosexual romantic relationship that has/had lasted at least six months, but no longer than 4 years. Additionally you acknowledge that you are not married. You will be asked to complete a questionnaire asking about your social networking site use, social comparison orientation, self-esteem, and relationship satisfaction. You are free not to answer any particular questions if they make you feel uncomfortable, or to withdraw your participation at any time without penalty.

<u>How long will I be in the study?</u>

It should take approximately 30 minutes for you to complete the entire study.

<u>What are the possible risks or discomforts?</u>

Breach of confidentiality is a risk. To minimize this risk, only the researchers will access the data from this study, and no personally identifying information will be collected during the study. The questions involve no greater risk than that found in everyday life.

Are there any potential benefits?

You will not directly benefit from this study. You will have a chance to take part in research, and your participation thus may contribute to the scientific understanding of how use of social networking sites may impact treatment related to mental health.

Will I receive payment or other incentive?

You will receive compensation of less than $1 for participating in this research project, so long as you meet the study inclusion criteria and you complete the appropriate verification question to ensure your active participation.

Will information about me and my participation be kept confidential?

There is no personally identifying information on this questionnaire; all responses will remain anonymous, and will be used only in combination with the responses of other participants in this and related studies. In addition, you may choose not to answer particular questions, or to withdraw your participation at any time, without penalty. All data gathered in this study will be stored separately from the consent form, and will be accessed only by the researchers. The data file will be used for preparation of research reports related to this study, and kept for a period of three years after publication of any articles related to this study. The project's research records may be reviewed by departments at Purdue University responsible for regulatory and research oversight.

What are my rights if I take part in this study?

You do not have to participate in this research project. If you agree to participate, you can withdraw your participation at any time without penalty.

Who can I contact if I have questions about the study?

If you have any questions about this research project, you can contact Kaitlyn Gantz at 219-989-2027. If you have concerns about the treatment of research participants, you can contact the Committee on the Use of Human Research Subjects at Purdue University, Ernest C. Young Hall, Room 1032, 155 S. Grant St., West Lafayette, IN, 47907-2114. The phone number for the Committee's secretary is (765) 494-5942. The email address is irb@purdue.edu.

Documentation of Informed Consent

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research project and my questions have been answered. I am prepared to participate in the research project described above. I certify that I am between 18 and 64 years old, and a U.S. citizen living in the U.S., and agree to participate in this study. I also certify that I have practiced yoga (involving physical postures and a meditative component) either currently or in the past.

- o   Yes, I agree to participate.
- o   No, I do not agree to participate.

APPENDIX B. QUESTIONNAIRE

Qualtrics Survey

What is your current age? (Answer in the form of a number i.e. 24)

Are you currently involved in a heterosexual romantic relationship?

○ Yes

○ No

How long have you been in a heterosexual, romantic relationship?

○ less than 6 months

○ between 6-12 months

○ between 1-2 years

○ between 2-3 years

○ between 3-4 years

○ over 4 years

What gender do you identify with?

o Male

o Female

o Transgender Female

- Transgender Male
- Gender Variant/Non-Conforming
- Prefer Not to Answer
- Other, please specify

Skip To: End of Survey If What gender do you identify with? = Transgender Female

Skip To: End of Survey If What gender do you identify with? = Transgender Male

Skip To: End of Survey If What gender do you identify with? = Gender Variant/Non-Conforming

Skip To: End of Survey If What gender do you identify with? = Prefer Not to Answer

What is your current relationship status?

- Married
- Widowed
- Divorced
- Separated
- Single
- Engaged
- Re-married
- Dating

Skip To: End of Survey If What is your current relationship status? = Married

Skip To: End of Survey If What is your current relationship status? = Single

What is your identified ethnicity?

- White/Caucasian (Not Hispanic)
- Hispanic/Latino
- Black/African American (Not Hispanic)
- Asian/Pacific Islander
- Native American
- Middle Eastern
- Multiracial
- Other, please specify

Which U.S. State do you presently reside in?

Alabama 1 ...   yoming (50)

What is your highest level of education?

- No formal education

- High School
- Some College
- College (Associates Degree)
- College (Bachelors Degree)
- Vocational Training
- Graduate level degree (Masters level degree)
- Doctorate or Professional Degree
- Other, please specify

What is your current employment status?

- Full-time employment
- Part-time employment
- Unemployed
- Self-employed
- Home-maker
- Student
- Retired

What is your estimated yearly income before taxes?

- Less than $10,000
- $10,000-$19,999
- $20,000-$29,999
- $30,000-$39,999
- $40,000-$49,999
- $50,000-$59,999
- $60,000-$69,999
- $70,000-$79,999
- $80,000-$89,999
- $90,000-$99,999
- $100,000-$149,999
- $150,000 or more

What is your identified sexual orientation?

- Straight/Heterosexual
- Gay
- Lesbian
- Bisexual
- Queer
- Asexual

o   Questioning
o   Other

Please indicate the degree of happiness, all things considered, of your relationship.

	Extremely Unhappy	Fairly Unhappy	A Little Happy	Happy	Very Happy	Extremely Happy	Perfect (7)
1.	○	○	○	○	○	○	○

In general, how often do you think that things between you and your partner are going well?

	All of the time	Most of the time	More often than not	Occasionally	Rarely	Never
2.	○	○	○	○	○	○

3.	Not at all true	A little true	Somewhat true	Mostly true	Almost completely true	Completely true
Our relationship is strong	○	○	○	○	○	○
My relationship with my partner makes me happy	○	○	○	○	○	○
I have a warm and comfortable relationship with my partner	○	○	○	○	○	○
I really feel like part of a team with my partner	○	○	○	○	○	○

	Not at all	A little	Somewhat	Mostly	Almost completely	Completely
How rewarding is your relationship with your partner?	○	○	○	○	○	○
How well does your partner meet your needs?	○	○	○	○	○	○
To what extent has your relationship met your original expectations?	○	○	○	○	○	○
In general, how satisfied are you with your relationship?	○	○	○	○	○	○

For each of the following items, select the answer that best describes how you feel about your relationship. Base your responses on your first impressions and immediate feelings about the item.

Interesting	5	4	3	2	1	0	Boring
Bad	0	1	2	3	4	5	Good
Full	5	4	3	2	1	0	Empty
Sturdy	5	4	3	2	1	0	Fragile
Discouraging	0	1	2	3	4	5	Hopeful
Enjoyable	5	4	3	2	1	0	Miserable

Please answer the following questions as truthfully as possible.

1 = Not at all like me

3 = Somewhat like me

5 = Very much like me

1. I feel better about myself when it seems like my partner and I are getting along.	1	2	3	4	5
2. I feel better about myself when it seems like my partner and I are emotionally connected	1	2	3	4	5
3. An	1	2	3	4	5

important measure of my self-worth is how successful my relationship is.					
4. My feelings of self-worth are based on how well things are going in my relationship.	1	2	3	4	5
5. When my relationship is going well, I feel better about myself overall	1	2	3	4	5
6. If my relationship were to end tomorrow, I would not let it affect how I feel about myself.	1	2	3	4	5
7. My self-worth is unaffected when things go wrong in my relationship.	1	2	3	4	5
8. When my partner and I fight, I feel bad about myself in general.	1	2	3	4	5

9. When my relationship is going bad, my feelings of self-worth remain unaffected.	1	2	3	4	5
10. I feel better about myself when others tell me that my partner and I have a good relationship	1	2	3	4	5
11. When my partner criticizes me or seems disappointed in me, it makes me feel really bad.	1	2	3	4	5

Please circle a number at a point which best describes the way in which you see yourself in comparison to others

	1	2	3	4	5	6	7	8	9	10	
Inferior	○	○	○	○	○	○	○	○	○	○	Superior
Incompetent	○	○	○	○	○	○	○	○	○	○	More Competent
Unlikeable	○	○	○	○	○	○	○	○	○	○	More Likeable
Left Out	○	○	○	○	○	○	○	○	○	○	Accepted
Different	○	○	○	○	○	○	○	○	○	○	Same
Untalented	○	○	○	○	○	○	○	○	○	○	More Talented
Weaker	○	○	○	○	○	○	○	○	○	○	Stronger
Unconfident	○	○	○	○	○	○	○	○	○	○	More Confident
Undesirable	○	○	○	○	○	○	○	○	○	○	More Desirable
Unattractive	○	○	○	○	○	○	○	○	○	○	More Attractive
An Outsider	○	○	○	○	○	○	○	○	○	○	An Insider

The following numbers represent time in minutes. Please estimate to the best of your ability how many minutes per day you spend on each of the following social networking sites.

[SLIDER BAR TO ANSWER, FROM 0 (LOWEST) TO 300 (HIGHEST)]

Facebook	0	30	60	90	120	150	180	210	240	270	300
Instagram	0	30	60	90	120	150	180	210	240	270	300
Snapchat	0	30	60	90	120	150	180	210	240	270	300
Twitter	0	30	60	90	120	150	180	210	240	270	300

The following numbers represents days per week. Please estimate how often you use the following social networking sites to post about your romantic relationship.

[SLIDER BAR TO ANSWER, FROM 0 (LOWEST) TO 7 (HIGHEST)]

Facebook	0	1	2	3	4	5	6	7
Instagram	0	1	2	3	4	5	6	7
Snapchat	0	1	2	3	4	5	6	7
Twitter	0	1	2	3	4	5	6	7

Please answer the following questions as truthfully as possible.

	Never	Rarely	Sometimes	Often	Always
1. I feel happy when I compare my relationship to others' relationships that are better than mine.	○	○	○	○	○
2. I feel bad when I compare my relationship to others' relationships that are better than mine.	○	○	○	○	○
3. I feel good when I compare my relationship to others' relationships that are worse than mine.	○	○	○	○	○
4. I feel sad when I compare my relationship to others' relationships that are worse than mine.	○	○	○	○	○
5. I enjoy comparing my relationship to other couples' relationships.	○	○	○	○	○

6. I find comparing my relationship to other couples' relationships to be unpleasant.	○	○	○	○	○
7. When I am thinking about other relationships it makes me feel better about my own relationship.	○	○	○	○	○
8. When I am thinking about other relationships it makes me see problems in my own relationship.	○	○	○	○	○
9. When I am thinking about other relationships it helps me see positive aspects of my own relationship.	○	○	○	○	○
10. When I am thinking about other relationships it makes me more optimistic about my own	○	○	○	○	○

relationship.

11. When I see a happy couple I feel happy about my relationship.

○   ○   ○   ○   ○

12. When I see a happy couple I feel distressed about my relationship.

○   ○   ○   ○   ○

13. When I see an unhappy couple I feel good about my relationship.

○   ○   ○   ○   ○

14. When I see an unhappy couple I feel depressed about my relationship.

○   ○   ○   ○   ○

15. When I compare my relationship to other people's relationships, I focus on those relationships that are happier than mine.

○   ○   ○   ○   ○

16. When I compare my relationship

○   ○   ○   ○   ○

to other people's relationships, I think about those relationships that are worse off than mine.

17. I avoid thinking about other people's relationships that are better off than mine.

○   ○   ○   ○   ○

18. I can learn a lot about my relationship by comparing it to other relationships that are working really well.

○   ○   ○   ○   ○

19. I can learn a lot about my relationship by looking at other couples who are having a lot of problems.

○   ○   ○   ○   ○

20. I can learn more about my relationship by comparing it to very well-functioning relationships than by

○   ○   ○   ○   ○

comparing it to those that are functioning poorly.

21. I compare my relationship to other people's relationships.

○   ○   ○   ○   ○

22. I think about my relationship in comparison to other people's relationships.

○   ○   ○   ○   ○

23. It is helpful to me to think about how my relationship compares to other people's relationships.

○   ○   ○   ○   ○

24. I compare how my partner is in our relationship to how others' partners are in their relationship.

○   ○   ○   ○   ○

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you.

	True	False
It is sometimes hard for me to go on with my work if I am not encouraged.	○	○
I sometimes feel resentful when I don't get my own way.	○	○
On a few occasions, I have given up doing something because I thought too little of my ability.	○	○
There have been times when I felt like rebelling against people in authority even though I knew they were right.	○	○
No matter who I am talking to, I'm always a good listener.	○	○
There have been occasions when I took advantage of someone.	○	○
I'm always willing to admit it when I make a mistake.	○	○
I sometimes try to get even, rather than forgive and forget.	○	○
I am always courteous, even to people who are disagreeable.	○	○
I have never been irked when people expressed ideas very different from my own.	○	○
There have been times when i was quite jealous of the good fortune of others.	○	○

I am sometimes irritated by people who ask favors of me. ○ ○

I have never deliberately said something that hurt someone's feelings. ○ ○