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Social Networking Sites and Online Infidelity

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Walden University

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Amber N. Adams

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Walden University
2017

Abstract

Social Networking Sites and Online Infidelity

by

Amber Nicole Adams, MS

MS, Walden University, 2009

BS, Glenville State College, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Psychology

Walden University

February 2017

Abstract

Biological factors, attachment styles, socioeconomic status, and religion are among some of the variables researched as casual factors of infidelity. However, limited research is available for infidelity originating online. This study aimed to investigate causal factors for engaging in online infidelity via social networking site use. A cognitive behavioral perspective guided the research. Review of literature on offline infidelity, online behavior, and Davis' work on generalized problematic internet use identified the variables relationship satisfaction, impulsivity, permissive sexual values, and the intensity of social networking site use for exploration. Research questions addressed any contribution these four variables may have to engaging in online infidelity. A cross-sectional online survey including the Relationship Assessment Scale, Barrett Impulsivity Scale, Brief Sexual Attitudes Scale, and Problematic Internet Use Questionnaire targeting individuals 21 years of age and older, who reside in the United States, as well as, the U.S. Virgin Islands was available to the public. 136 respondents completed the survey. The study identified relationship satisfaction, rather than relationship dissatisfaction, as the primary predictor of engaging in online infidelity. Additionally, a stronger presence of permissive sexual values was associated with an increase in relationship satisfaction. Those attempting to engage in online infidelity, a group not previously researched, is predicted by impulsivity. The findings from this study can be used by individuals and professionals alike for improving individualized therapeutic practice. The research findings indicate future research in respect to online infidelity, social networking site use, and the population of individuals that attempt to engage in infidelity would be beneficial.

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Dedication

In dedication to my son, Alexander, may you always have the strength to silence the doubt from within and outside yourself. That doubt will be your worst enemy if you allow it. You fell many times before you began to walk, the rest of your life will be no exception.

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Introduction

Modern advancements in technology have brought about major revisions in day-to-day social interactions within the United States (Ackland, 2009; Giddens, 1992; Jones, 2005; Lewis & West, 2009). World-wide Internet accessibility has become relatively effortless for a vast majority of the population due to the increase in Internet-compatible devices (Hatala, Milewski, & Baack, 1999; Ono & Tsai, 2008; Underwood & Findlay, 2004). The devices allow for an ease of accessibility and an exponential increase in online connectivity. This connectivity has further changed the dynamics of how interpersonal relationships develop. Online communication may potentially remove stress and anxiety that affects some people in social situations (McKenna, & Bargh, 2009). With the mask of a screen, online interaction allows the pressure of first appearances, an urgency of speech, and worry of every minor detail to be reduced. The simplicity of these connections to others further aids online relationship development. One can access a social networking site, search for contacts in a specific city/town, who also share personal interests, are in a specific career field, who are of a particular gender, age, and/or name. Within seconds, the population of people germane to the search criteria registered with that social networking site will load onto the screen. From here, all one must do is request a connection. Through social networking sites, immediate relationships are made.

Social networking sites are web-based services where an individual can develop a profile that typically presents personal characteristics and demographics. This profile allows other users to inspect details about this person, determine mutual interests, and potentially establish a connection (Boyd & Ellison, 2007). Expansion of one's social

network allows access to potentially beneficial resources that may be available with the development of new connections (Lin, 1999).

Statistics gathered in 2009 displayed the increasing trend of social networking site utilization. Within the United States, 47% of adults who were online visited such sites (Lenhart, Purcell, Smith, & Zickuhr, 2010). For adults alone, this statistic was up from 2005 when only 8% were utilizing social networking sites (Lenhart et al., 2010). This exponential increase suggests a desire of people to establish and maintain a virtual presence.

Social networking sites are an avenue of socialization that conveniently enables the development of relationships (Farrell & Peterson, 2010). Establishing new connections around the world, or even reconnecting with those from one's past has become simplistic, discreet, and exciting (Collins, 1999; Farrell & Peterson, 2010; Hatala et al., 1999; Underwood & Findlay, 2004). Many benefits in sociocultural expansion can manifest when creating connections outside of a person's immediate proximity. These benefits, alongside the convenience of social networking sites, easily enable relationship development. When these factors come together, it becomes easier to open up and share personal details of one's life. In fact, virtual interaction allows a discreet avenue for the conveyance of elaborate sexual fantasies (Stone, 1995). This behavior can be performed anonymously and discreetly by an individual who is either single or in an offline relationship. Being active within a social networking site does not imply an interest in sexual behavior or any of the other behaviors expressed herein. Social networking sites simply provide an opportunity for these behaviors to manifest.

In this research study, I focused on factors that predict the frequency of behaviors involved in seeking out and establishing online relationships (emotional and/or sexual) instead of investing in existing offline relationships. This conduct is known as online infidelity, cyber infidelity, cyber-mediated infidelity, and/or cyberspace betrayal (Cooper & Griffin-Shelley, 2002). To minimize confusion, I will use the term online infidelity throughout this study. The criteria for online infidelity focuses on emotional exclusivity, sexual exclusivity, and secrecy with a person outside of the primary relationship (Glass, 2003; Hertlein & Piercy, 2006; Schneider, 2000; Yarab, Sensibaugh, and Allgeier, 1998). Mental exclusivity pertains to a nonsexual romantic attraction involving sharing of fantasies (sexual and/or non-sexual), conversing regularly, and flirting (Yarab et al., 1998). Sexual exclusivity relates to a sexual attraction with the online partner outside of the primary offline relationship. Within the online sexual relationship, behaviors of sharing sexually explicit conversations, photos, and/or videos occur (Yarab et al., 1998). This behavior is potentially deemed exclusive to the online relationship because of the withdrawal from the primary offline relationship (Cooper, McLoughlin, & Campbell, 2000; Treas & Giesen, 2004). Secrecy is another important aspect of online infidelity. This secrecy regards the deletion of transcripts and/or emails, as well as the ability to keep interaction covert (Glass, 2003; Schneider, 2000).

This chapter will provide a summary of current literature. This overview will present background information that details a need for evaluation of online infidelity via social networking site use. The theoretical perspective that I used to evaluate online infidelity via social networking site use is explained. Research questions, and

methodology are also provided. In this chapter, I will highlight the need for evaluation of an underrepresented area that seems to be developing into a crucial social problem. The results obtained from this research could provide information for advancing therapeutic practices for individuals as well as couples.

Background

Extra-dyadic relationships, even before the prominence of Internet use, were the principal cause of divorce in 160 cultures (Betzig, 1989). In 1999, once Internet communication became available, 42% of Internet users had admitted to engaging in an affair while online (Greenfield, 1999). Online infidelity consists of both emotional and sexual components (Whitty, 2005). Due to the lack of real-time physical presence, online infidelity is speculated by some to be less damaging to offline relationships (Margonelli, 2000). To the contrary, another study has indicated that online users may be interested in real-life partners rather than online interactions only (Wysocki & Childers, 2011). In 2000, 66% of offline couples, whose relationships were affected by online infidelity, expressed a loss of interest in sex with their spouse and, of the same respondents, approximately 25% ended up separating or divorcing (Schneider, 2000). In 2012, the social networking site Facebook was cited in one-third of divorces filed (Lumpkin, 2012). Thus, the establishment of online romantic relationships, emotional and/or sexual, can have a significant effect on offline romantic relationships.

The Internet appeals to those looking for sex partners. The topic of sex is easy to find, whether it be information pertaining to sex, interest groups, live chat/video, and/or the ability to connect (Barak & King, 2000; Cohen, 2008; Cooper, Mansson, &

Danebeck, 2003; Farrell & Peterson, 2010). Testimonials from people who engaged in online infidelity convey the ease of sharing personal details about themselves (Jones, 2005; Whitty, 2005; Wysocki, 1998). Internet interaction provides a veil over apprehensions that commonly arise when dating, such as those related to physical attributes, clothing, irritating quirks, and/or other common concerns (Cohen, 2008; Jones, 2005; Maheu & Subotnik, 2001; Whitty, 2005). This less invasive development of communication aids in determining if one would like to meet another in a real-life environment (Wysocki & Childers, 2011). Additionally, online communication allows for selection of who to build a relationship with based on specific characteristics. It resembles an interview process but for relationship development. There may be a characteristic found in a potential relationship that is not present in the primary offline relationship which can peak curiosity and intrigue. However, this establishment of a new online relationship does not guarantee infidelity. In this study, I focused on variables that could potentially predict the likelihood of a person engaging in online infidelity. These variables have been chosen based on current literature.

Subjective relationship dissatisfaction one causal factor related to engaging in infidelity (Brown, 1991; Shackelford & Buss, 1997; Treas & Giesen, 2000). There is no research on this matter within the confines of online infidelity. However, studies indicate that social networking sites make infidelity more efficient with the allure of an immediate outcome (Wysocki & Childers, 2011). In a moment of sadness, anger, and frustration during a relationship, an individual may reach out to someone who provides empathy and support. The Internet makes this more accessible. [A bit more transition and context for

the assessment scale] The Relationship Assessment Scale measures relationship satisfaction (Hendrick, 1988).

The intensity of Internet use was the chief factor that warranted further research into problematic Internet behavior (Davis, 2001). Based on Davis' (2001) model, the intensity of Internet use increases due to maladaptive cognitions and behaviors involving the Internet. Davis (2001) describes this as a cycle. There is usually a precipitating factor, such as stress, that triggers a precipitating dysfunction (diminished impulse control, ease of distraction, social discomfort, and/or depression/loneliness) in the individual leading to engagement in activities online. This online activity is then increased while exacerbating both the stressor and dysfunction (Davis, 2001; Caplan, 2002). A later study on the intensity of Internet use has shown that increasing interactions online may ease losses in communication with offline relationships (Bargh & McKenna, 2004). This same study from Bargh and McKenna (2004) was not directed towards extradyadic relationships. However, it allows for speculation that a person gaining support and finding more emotional and/or sexual value within their Internet relationship may increase time spent online and away from the primary offline relationship.

A prime factor of offline infidelity is the amount of time spent with one's partner and another person outside of the relationship (Hertlein & Piercy, 2008). When one begins spending more time away from the primary relationship and spending more time with another individual, there is an increased likelihood of engaging in infidelity (Hertlein & Piercy, 2008). This study conducted by Hertlein and Piercy (2008) does not reflect online behavior or online infidelity; yet, spending time online and establishing

relationships, romantic or otherwise, is identified as spending time away from the primary relationship. With the portability of online communication, it may not be considered spending time away when sitting next to ones' significant other on the couch while interacting with people on Facebook through handheld devices. With this ability to communicate ubiquitously, the physical presence alone does not constitute spending time together anymore. One can begin to establish a separate virtual life and further exacerbate the factors that allow for opportunity of infidelity to occur. For my research, Internet use is identified as social networking site use. My modification of the Problematic Internet Use Questionnaire Short Form (PIUQ-SF) with questions being restated by the wording "social networking sites" in place of "online" and "the Internet" reflects this change. The original Problematic Internet Use Questionnaire [PIUQ] was developed by Demetrovics and colleagues (2008) and was based on the research of problematic Internet use completed by Davis (2001). Koronczai et al. (2011) developed a modified version, which was utilized for this study.

Impulsivity has been well researched for many online and offline behaviors, such as gambling, drug use, gluttony, and infidelity (Davis, 2001; Madden & Bickel, 2010). Payne (2005) theorized high impulsivity affects one's ability to refrain from acting on impulses and desires (Payne, 2005). These impulses and desires are further compounded when reward is perceived as immediate (Madden & Bickel, 2010; Payne, 2005). One study postulated that impulsivity positively correlates with sex drive (Shackelford et al., 2008). Thus, people who are more impulsive are likely to search for extramarital encounters and have a higher likelihood of acting on sexual opportunities that arise

(Shackelford et al., 2008). Although there has been literature on impulsivity and offline infidelity, the existing literature has no evidence of impulsivity as it relates to online infidelity. Therefore, the results of my study provides new insight into the influence, if any, that impulsivity has in predicting online infidelity via social networking sites. I used the Barratt Impulsiveness Scale 15, developed by Spinella (2007), which is a short-form of the Barratt Impulsiveness Scale 11 (Patton, Stanford, & Barratt, 1995) to measure impulsivity for this research.

The final dynamic of this research regarding online infidelity is permissive sexual values. Permissive sexual values are subjective perceptions of premarital sex and infidelity (Smith, 1994). In addition to beliefs about infidelity, permissive sexual values relate to sexual inhibition and interest in sex (Treas & Giesen, 2000). A low level of sexual inhibition is indicated as contributing to sexual infidelity (Mark, Janssen, & Milhausen, 2009; Smith, 1994). I examined these values on online infidelity via social networking sites. I used the Brief Sexual Attitudes Scale (Hendrick, Hendrick, & Reich, 2006) to measure permissive sexual values for this study.

Each variable has been previously researched and has some association with infidelity, offline and/or online. The only exception to this is the intensity of social networking site use, which has only been examined in relation to improving college students' psychological well-being and self-esteem (Ellison et al., 2007; Steinfeld, Ellison, & Lampe, 2008). In this study, I looked at this variable as being a factor that takes time away from the primary offline relationship, where time away from the primary relationship is suggestive of motivation for infidelity. There is no current research

specific to the four variables being predicting factors of online infidelity, nor is any literature available for precipitating factors of online infidelity via social networking sites.

Problem Statement

Increasing occurrences of online extramarital romantic, emotional, and/or sexual relationships establish a need for further research, especially when the topic of online infidelity lacks any substantial literature. Online communication is increasing, which seems to present an opportunity for behaviors of infidelity. The mention of Facebook within one-third of divorce documentation is suggestive of this increase in unfaithful conduct. Online infidelity via social networking site use is a highly neglected topic of study that, due to implied social consequences on personal relationships with self and others, warrants research.

Purpose of Study

The purpose of this study was to analyze four variables from current literature and determine how well they predict the frequency of online infidelity via social networking sites. These four dependent variables are as follows: relationship satisfaction (Brown, 1991; Shackelford & Buss, 1997; Treas & Giesen, 2000), intensity of social networking site use (Cooper et al., 2000; Hertlein & Piercy, 2008), impulsivity (Madden & Bickel, 2010; Payne, 2005; Shackelford, Besser, & Goetz, 2008), and permissive sexual values (Smith, 1994). The methodology of this study is quantitative.

Research Questions and Hypotheses

The following research questions and hypotheses outline how I evaluated the four variables of interest within this study. My goal was to potentially determine how well relationship satisfaction, intensity of social networking site use, impulsivity, and/or permissive sexual values predict the frequency of online infidelity.

Research Questions and Hypotheses

RQ1: Is relationship satisfaction the best predictor of the frequency of engaging in online infidelity when intensity of social networking site use, impulsivity, and permissive sexual values are competing dependent variables?

H₀1: Relationship satisfaction is not the best predictor of the frequency of engaging in online infidelity when analyzed against intensity of social networking site use, impulsivity, and permissive sexual values.

H_a1: Relationship satisfaction is the best predictor of the frequency of engaging in online infidelity when analyzed against intensity of social networking site use, impulsivity, and permissive sexual values.

RQ2: Is there a difference between those who have engaged in online infidelity and those who have not engaged in online infidelity based on the following variables: relationship satisfaction, impulsivity, intensity of social networking site use, and/or permissive sexual values?

H₀2: There is not a difference between those who have engaged in online infidelity and those who have not engaged in online infidelity based on the following variables: relationship satisfaction, impulsivity, intensity of social networking site use, and/or permissive sexual values.

H_{a2}: There is a difference between those who have engaged in online infidelity and those who have not engaged in online infidelity based on the following variables: relationship satisfaction, impulsivity, intensity of social networking site use, and/or permissive sexual values.

RQ3: Does impulsivity moderate the relationship between relationship satisfaction and the frequency of engaging in online infidelity?

H₀₃: Impulsivity does not moderate the relationship between relationship satisfaction and the frequency of engaging in online infidelity.

H_{a3}: Impulsivity does moderate the relationship between relationship satisfaction and the frequency of engaging in online infidelity.

RQ4: Does social networking site use moderate the relationship between permissive sexual values and the frequency of engaging in online infidelity?

H₀₄: Social networking site use does not moderate the relationship between permissive sexual values and the frequency of engaging in online infidelity.

H_{a4}: Social networking site use does moderate the relationship between permissive sexual values and the frequency of engaging in online infidelity.

RQ5: Does social networking site use mediate the relationships between relationship satisfaction and the frequency of engaging in online infidelity?

H₀₅: Social networking site use does not mediate the relationship between relationship satisfaction and the frequency of engaging in online infidelity.

H_{a5}: Social networking site use does mediate the relationship between relationship satisfaction and the frequency of engaging in online infidelity.

Theoretical Framework

There is no one clear, cohesive theory of online infidelity. Studies only partially measure the complexity of online infidelity. The majority of current literature evaluates online infidelity from an evolutionary perspective (Buss, Larsen, Westen, & Semmelroth, 1992; Buss & Shackelford, 1997; Henline, Lemke, & Howard, 2007; Whitty, 2003; Whitty, 2005). There has been some debate as to the relevance of evolutionary theory applying to online infidelity since there is no danger of procreation due to the virtual environment (Henline et al. 2007). There has been minimal research from the cognitive behavioral theoretical lens; however, this pertains to problematic Internet use where online infidelity is only minimally referred to as one small factor of problematic Internet use (Davis 2001; Caplan, 2002; Caplan, 2003). The ideology of cognitive behavioral theory and the work of Davis (2001) were the foundations of this research study. Without a clearly identifiable theory of online infidelity, I used this theoretical framework to examine four variables from a cognitive-behavioral perspective. The four variables for this research had no relation to Davis' (2001) study. Current literature suggests a relationship between these four variables and infidelity, offline and/or online, thus I selected these variables for this research.

Davis' (2001) multidimensional, theory-driven evaluation of Internet use elaborated on the idea that the definition of problem Internet use is reliant on the intensity of use alone. This model was developed to address behaviors of online gambling, online sex, and engaging in illegal activities online (Davis, 2001). The model of generalized problematic Internet use includes factors of impulse control, depression/loneliness, social

comfort, and distraction—defined as stress—as influences on problematic Internet use (Davis, 2001). It is a pivotal theory and was the first based on the cognitive-behavioral perspective about online “problematic” behaviors. No research since Davis (2001) and those modeling his theory (Caplan, 2002; Caplan, 2003) has focused on the cognitive behavioral perspective about online infidelity specifically.

Davis’ (2001) work on problematic Internet use, current research of online behaviors, and studies concerning offline infidelity have indicated the following four factors in relation to infidelity: (a) relationship satisfaction (Brown, 1991; Shackelford & Buss, 1997; Treas & Giesen, 2000), (b) intensity of social networking site use (Cooper et al., 2000; Hertlein & Piercy, 2008), (c) impulsivity (Madden & Bickel, 2010; Payne, 2005; Shackelford et al., 2008), and (d) permissive sexual values (Smith, 1994). It was my intent to examine the relationships, if any, between these four variables and online infidelity via social networking sites. Each of these variables are described in further depth in Chapter 2. A clearer understanding of online infidelity is sought through the analysis of multiple variables.

Nature of Study

Previous research on behaviors and perceptions of unfaithful behavior, both online and offline, influenced the development of this study. The four variables: relationship satisfaction (Brown, 1991; Shackelford & Buss, 1997; Treas & Giesen, 2000), intensity of social networking site use (Cooper et al., 2000; Hertlein & Piercy, 2008), impulsivity (Madden & Bickel, 2010; Payne, 2005; Shackelford, Besser, & Goetz, 2008), and permissive sexual values (Smith, 1994) have been researched in relation to

infidelity, offline and/or online. I designed this study to identify if any common characteristics exist amongst the population of United States residents, 21 years of age and older who have engaged, or are engaging, in online infidelity via social networking sites. I conducted additional analysis to assess differences among those that have engaged or are engaging in online infidelity and those that deny any engagement in online infidelity. Previous research is dated (Glass & Wright, 1977; Petersen, 1983; Prins, Buunk, & VanYpren, 1993), collected from a population of college students (Ellison et al., 2007; Steinfeld, Ellison, & Lampe, 2008), and focused mainly on perceptions of online infidelity rather than precipitating variables of online infidelity (Wysocki & Childers, 2011). Wysocki and Childers (2011) presented research of similar interest to my study which includes related variables, yet the studies focus was on the behavior of people who commit online infidelity and how individuals use the Internet to engage in this behavior. Variables that precipitate engaging in online infidelity via social networking sites have no known empirical evidence.

I assessed each variable individually by questionnaires that have been utilized in previous research. I combined the individual questionnaires were combined into a 49-item survey and presented this cumulative survey by way of a public message on various social networking sites (Myspace, Facebook, and LinkedIn), as well as Walden Universities Participant Pool and findparticipants.com research recruitment sites. There was a hyperlink embedded into the message where, upon clicking, the participants were transported to a safe external site hosted by PsychData to anonymously complete the survey.

To accurately evaluate the behavior involved in online infidelity, only respondents that have had or are having an online affair that commenced online were analyzed. I have presented a thorough discussion of research design and methodology in Chapter 3.

Definition of Key Terms

The following is a list of common terms used throughout this research study. Some terms, at times, can have dual meanings. Therefore, the provided terms and definitions will directly relate to the interpretation intended for this research study.

Connection: “a relation of personal intimacy (as of family ties),” “a person connected with another especially by marriage, kinship, or common interest,” and “a political, social, professional, or commercial relationship (*Merriam-Webster’s Collegiate Dictionary*, 2005).” In this study, connection means a relationship of common interest, e.g. political views, social interests, professional, commercial, and/or intimate.

Impulsivity: “The behavioral universe thought to reflect impulsivity encompasses actions that appear poorly conceived, prematurely expressed, unduly risky, or inappropriate to the situation and that often result in undesirable consequences” (Daruna & Barnes, 1993, p. 23). Also, *impulsive*: relating to or activated by an impulse rather than controlled by reason or careful deliberation (*Steadman’s Medical Dictionary*, 1995).

Infidelity: “Violation of norms regulating the level of emotional or physical intimacy with people outside the relationship” (Drigotas & Barta, 2001); a behavior that intends to be hidden or deceitful (Fife, Weeks, and Gambescia, 200). In this study, I examined unfaithfulness to committed romantic relationships, not just marriages alone.

The Intensity of Social Networking Site Use: the invasiveness of social networking site use in a persons' life based on psychological effects experienced from not being on, the frequency of use, how others perceive their use, and loss of productivity in other aspects of life.

Online Infidelity: the aforementioned definition of "infidelity" applied to the occurrence of unfaithfulness to one's significant other by using the online, Internet, or web-based environment.

Permissive Sexual Values: subjective beliefs of premarital and extramarital sex, where being more permissive is associated with more liberal views towards sexual behaviors (Smith, 1994).

Problematic Internet Use: "an individual's inability to control their Internet use, which in turn leads to feelings of distress and functional impairment of daily activities" (Shapira et al., 2000). Also, the Internet acts as a portal for the expression of paraphilias, gambling, shopping, online sex, and other potentially harmful behaviors that, if persistent, can cause significant stress and functional impairment personally, professionally, and socially (Shapira, et al., 2000). Online infidelity is examined as a problematic Internet use due to the negative social and personal implications.

Relationship Satisfaction: A definition of marital satisfaction is a reference to "an attitude of greater or lesser favorability toward one's own marital relationship" (Roach, Frazier, and Bowden, 1981).

Social Networking Site: a web-based environment that fosters the development and maintenance of relationships among people, throughout the world that share a mutual

interest (Raacke & Bonds-Raacke, 2008). There are many different types of social networking sites available with varying technological differences. For example, YouTube is a social networking site with primary interest in video uploading, World of Warcraft is a social networking environment where game-play takes place amongst users, and Facebook is a text-based community which relies on primarily text-based communication and allow for making immediate connections, sharing pictures/videos, and social interacting through comments, messages, or posting. These are all very different, but they all satisfy the goal of building a connection or establishing a new “friend” that shares a mutual interest in some way. Social networking sites, as referenced in this research study, are identified as those sites similar to the platform of Facebook.

Assumptions, Limitations, Scope, & Delimitations of Study

Assumptions

The first assumption is that participants have experienced intimate, emotional and/or sexual, online experiences based on their completion of the survey. The second assumption is that respondents’ answers are accurate and truthful based on their understanding of the questions. The third assumption is the validity and reliability of the compiled questionnaire. The final assumption is that all respondents who choose to participate speak English, live in the United States, and come from diverse residential backgrounds (i.e., suburban, urban, and rural) based on their responses to the initial demographic questions.

Limitations

The participants were limited to the physical location of the United States based on self-reporting of geographical location. The generalization of results is minimized due to the number of respondents that chose to participate in the study. Further limitation arose from the need to remove respondents' data if they had not experienced online infidelity specific to social networking site use. Moreover, the study only included those participants 21 years of age and older. A limitation and potential design issue were that respondents might not fully view some of their behaviors as infidelity. This topic is one that is not widely researched and may not be fully understood by some.

Scope and Delimitations

The results of this study will identify with those matching similar demographics and locations to the respondents. Those within different age ranges or from different geographical locations may have similar experiences, yet, the study only examines those individuals 21 years of age and older residing in the United States with the experience of online infidelity.

Significance and Implication for Social Change

In this era when the social-networking population is expanding, an inadvertent modification has been made to the social dating script (Lenhart et al., 2010). Scripts are socially accepted guidelines that set forth an expectation of behavior (Bussey & Bandura, 1999; Gagnon & Simon, 1967; Harris & Christenfield, 1996). Family, friends, and media influence these scripts (Gagnon & Simon, 1967; Sanders, 2008). Original scripts of ideal romantic relationships involved seeking out partners that shared common interests, lived nearby, were within a 5-year age range, and held the mutual expectation they would live

happily ever after (Giddens, 1992). With advancements in technology, these scripts are now altered regarding sexuality and how relationships develop.

These changes in the dynamics of relationships provoke a need for thorough research and understanding. Due to the social impact online infidelity has, it is important to be able to identify any variables that contribute to this behavior. This research was designed to provide insight towards variables that can potentially predict personal qualities that would increase the likelihood of a person's instances of engaging in online infidelity via social networking sites. This research could assist in identifying at-risk populations, in tailoring concepts of couple-enrichment programs, and provide couples and/or individuals a more direct and efficient therapeutic plan.

Summary

To better understand the effects of these adjustments in dating standards and identify any adverse impact social networking site use has on social relationships, expanding research in online infidelity is vital. What individuals perceive as infidelity, both online and offline, has been well researched (Gerson, 2011; Whitty, 2003; Whitty & Quigley, 2008). However, few studies are devoted to identifying individual factors that predict online infidelity. Additionally, much of the research involving the four variables within this research has primarily been about offline infidelity. Although current research has provided many variables that indicate correlations with infidelity, this has left online infidelity underrepresented.

In Chapter 2, I review pertinent literature indicating this lack of representation. I discuss current literature on, both, offline and online infidelity and Davis' (2001) work on

problematic Internet use. I provide a review of current literature involving the four variables of interest as predictors of online infidelity with an explanation of each variable. In Chapter 3, I provide a thorough explanation of the population of interest, research design and methodology, description of measures for data collection, and ethical considerations. In Chapter 4 I summarize collected data and post-analysis results. In the final chapter, I provide an interpretation of results followed by a discussion and recommendations for further research.

Chapter 2: Literature Review

Introduction

Infidelity is one of the most troubling events to occur within a romantic relationship, and one of the most complex problems to treat within couple's therapy (Allen et al., 2005; Gordon, Baucom, & Snyder, 2005; Whisman, Dixon, & Johnson, 1997). In fact, marital therapists have expressed extramarital affairs as being the second most devastating event to occur in a marriage, next to domestic violence (Whisman et al., 1997). American couples (married and cohabitating) express the importance of fidelity (Allen et al., 2005; Bawin-Legros, 2004; Blumstein & Schwartz, 1983; Greeley, 1991).

A recent study indicated 42.4% of respondents had engaged in some form of infidelity within their current relationship (Mark et al., 2009). This significant percentage may indicate why a vast amount of research regarding infidelity is available. Regardless of the quantity of current research, gaps persist and topics remain in question. Much of the available research has placed focus on gender differences, demographics (i.e., age, education, socioeconomic status, and location), consequences, and perceptions of behaviors of infidelity. These issues are examined through a social and evolutionary theoretical lens. Moreover, the emphasis has primarily been on offline infidelity.

The advent of online interaction through social networking sites such as MySpace, Facebook, and LinkedIn have provided a new platform for online infidelity and warrants thorough examination. In this study, I do not condemn infidelity; rather, my goal was to provide knowledge of behavior that has seemed to become a problem among couples. The examination of variables that could predict a person's likelihood of

commencing and maintaining any communications that could lead to participation in behaviors of infidelity online via social networking sites are detailed herein.

In this chapter, I will explain the collection process for the review of the current literature. I have conveyed a description of the theoretical perspective and detailed key concepts of this research, i.e., online behaviors, social networking sites, and infidelity. I will also offer an explanation of the current literature surrounding the variables of interest and their relevance to this research.

Literature Search Strategy

I utilized electronic searches to gather relevant articles. These databases include PsycINFO, PsycARTICLES, Google Scholar, SAGE Premier, and Health and Psychosocial Instruments (HaPI). The search terms used were *infidelity*, *extramarital relationships*, *cyber-mediated infidelity*, *online infidelity*, *online infidelity and motivation*, *online behaviors*, *online addiction*, *problematic Internet use*, *the motivation for infidelity*, *social networking site use*, *social networking site behavior*, and *perceptions of infidelity*. Hundreds of articles populated in relationship to all of these topics; however, 40 articles were helpful for this research.

The articles I selected were dated from 1953 to 2013. I used older sources to obtain an understanding of the background of the studies and concepts. The articles were a mixture of qualitative, quantitative, and meta-analysis. Themes from the literature were therapeutic and educational intervention, thus, the literature is reviewed under these themes.

Davis' Cognitive Behavioral Model

There is a lack of shared theoretical perspective in regards to online infidelity. Much of the current research has stressed social theory or evolutionary theory explanations for infidelity. I focused on cognitive behavioral theory, where cognitive symptoms precede the conduct in question and once coupled with the behavior will amplify and/or maintain the response. There are no studies focusing specifically on online infidelity in relation to cognitive-behavioral theory.

Davis (2001) presented research about generalized problematic Internet use where multiple behaviors were identified and grouped under this umbrella term. Although online infidelity is not specifically addressed, engaging in unfaithful conduct online could easily be recognized as a problematic use of the Internet. Davis (2001) identified a desire to maintain a social life through the social contact and reinforcement obtained within an online atmosphere. This finding was made before the expansion of social networking sites, but it correlates with more recent literature related to social networking sites and the desire to use them to develop and maintain relationships.

Davis's (2001) research, based on a diathesis-stress theoretical perspective, i.e., where abnormal behavior, defined as problematic Internet use, results from predisposed vulnerability (diathesis) and life events (stress). Predisposed vulnerability (diathesis) is identified as underlying depression, social anxiety, and/or active substance dependence (Davis, 2001). The stress in Davis' (2001) model is the actual stimuli of an explicit activity on the Internet (gambling, pornography, chatting, and/or auctions). Thus,

theoretically, underlying psychopathology coupled with the introduction of online stimuli could elicit problematic Internet use.

This research uses a similar theoretical framework to the one used by Davis (2001). The diathesis is not an underlying psychopathology specifically; rather, this vulnerability consists of personality factors and subjective life experiences as follows: relationship satisfaction, the intensity of social networking site use, impulsivity, and/or permissive sexual values. The life event of interest is exclusive to social networking site use. Just as Davis evaluated the convergence of underlying psychopathology and varying online stimuli as promoting problematic Internet use, I evaluated the synergy of personality factors and/or life events with social networking site use as predicting online infidelity. These four variables: relationship satisfaction, intensity of social networking site use, impulsivity, and/or permissive sexual values have been suggested to have some relationship, both directly and indirectly, to infidelity within current literature.

Online Activity, Use, and Behaviors

The Internet has become ubiquitous within the United States. Between 2003 and 2011, households accessing the Internet rose from approximately 55% to 72% (File, 2013). The Internet has a vast breadth of information, educational and otherwise, and activities that include, but are not limited to: online gaming, stock trading, gambling, sexual material/services, and social networking.

Online gaming involves two or more online users coming together for competition in either a traditional video game style similar to World of Warcraft and/or Words with Friends or a more nontraditional style of location tracking (i.e., Foursquare)

and/or exercise monitoring with multiple fitness applications (Yee, Duchenaet, & Nelson, 2012). Stock trading is the ability to buy and sell stock online (Klam, 1999). Online gambling entails the wagering of money on websites for, to list a few: poker, casino games, sports games, and fantasy sports leagues (Cotte and LaTour, 2009). Sexual material/services, as referenced here, refers to online pornographic websites that are either free or fee-for-service (i.e., pornhub.com), and sites available to find others looking for sexual partners (i.e., justhookup.com). Social networking is the use of online platforms to directly communicate and interact with other people globally.

These online behaviors of gambling, sexual services, and stock trading have been collectively researched and identified as online problematic and/or online addiction behaviors and have been assessed individually on a large scale (Caplan, 2002; Cotte and LaTour, 2009; Davis, 2001; Yee et al., 2012). The prime behavior of interest for the current research is the utilization of social networking sites to develop romantic emotional and/or sexual relationships while in a committed offline relationship.

Online Sexual Behavior

Online sexual behavior has grown in popularity and become one of the most sought after topics of online interest (Barak & King, 2000; Cohen, 2008; Farrell & Peterson, 2010; Maheu & Subotnik, 2001; Wysocki, 1998). As of 2006, pornographic websites alone were accountable for 12% of total online websites (Ropelato, 2007). This percentage roughly equates to 4.2 million active pornographic websites that were available. Approximately 40 million United States users were utilizing online access for visiting these sites on a regular basis (Ropelato, 2007). One study found online users

were spending up to 10 hours per week involved in some form of sexual activity (Cooper, Delmonico, & Burg, 2000). In 2006, another study reported 30% of its 508 married male respondents admitted to answering online advertisements seeking sexual partners (Dew, Brubaker, and Hays, 2006). Dew, Brubaker, and Hays (2006) did not include data about chat rooms, or other venues where sexual behavior has the potential to develop.

The Internet has become a prevalent medium for finding both virtual only and real-life sexual partners (Cooper et al., 2000; Couch & Liamputtong, 2008; Wood, 2008). In fact, many online users have had sexual fantasies fulfilled while others have met their spouses/partners (Blackstone, 1998; Castaldo, 2009; Epstein, 2009; Jones, 2005; Whitty & Carr, 2006; Wysocki, 1998). These relationships, while being convenient and private, have been described as “magical” in quality and rousing of ones’ suppressed self (Gerson, 2011; Tosun & Lajunen, 2009; Wysocki & Childers, 2011). The Internet allows for a lowering of inhibitions, which may be due to the ability to control messages and prevent infringement of reality, such as bad hygiene, personality differences, and unkempt appearance (Maheu & Subotnik, 2001; Tosun & Lajunen, 2009). Thus, anonymity and variety make the Internet an ideal environment to engage in online sexual behavior and to find sexual partners.

Social Networking Sites

Social networking sites offer a new venue for exploration, not only for sexual behavior, but also the establishment of relatively immediate interpersonal connections (Hatala et al., 1999; Maheu & Subotnik, 2001; Underwood & Findlay, 2004). A social networking site is a web-based community initially developed to keep in contact with

friends and family, and to make new friends (Raacke & Bonds-Raacke, 2008). Over time, a wide variety of social networking sites have become available. These sites support an assortment of interests and differing communication platforms. The key technological features remain standard from site to site. However, the diverse populaces that each site attracts differ. Most sites support a varied population, but others exist for members with a shared ethnic background, race, language, religion, occupation/professional interests, and/or sexual orientation. Modes of communication also vary from site to site with some social networking sites boasting mobile connectivity, blogging, and/or photo/video sharing (Boyd & Ellison, 2007).

The main characteristic of a social networking site user is their profile. Upon development of a social networking site profile, a series of detailed questions are presented. This personal information typically consists of, but is not limited to, age, sex, interests, hobbies, organizational affiliations, education, employment, and geographical location (Boyd & Ellison, 2007). Most sites also recommend uploading a profile photo. Each social networking site may have some unique quality that differentiates it from another. For example, LinkedIn is a social networking site that targets professional individuals seeking connections for career development; whereas, MySpace is a social networking site that has a reputation for musical appreciation and allowing a user to control the design of their profile from fonts to background design.

Controlling visibility of a social networking site users profile is another aspect that differs from site to site. Some social networking sites are completely public and have no ability to limit their privacy (Boyd & Ellison, 2007). Some sites can restrict visibility

to those in their immediate ‘network’ while other sites charge a fee to make this privacy feature available. Another privacy option is the omission of information they do not want to make public knowledge, i.e., sexual orientation, relationship status, and/or age. Another component of visibility on social networking sites is public access to a user’s connections. This visibility allows one user to see their current connections’ list of “friends.” From here, this user can then navigate to other users’ profiles within their extended network without an established connection (Boyd & Ellison, 2007). This feature allows for the expansion of a user’s network and the establishment of new connections that may not be made in other circumstances.

Connections can be made between complete strangers that may or may not share a social commonality. However, many connections originate through “latent ties” where a mutual offline connection/friend is involved (Haythornwaite, 2005). It is more common for people to expand their extended social network rather than develop connections with strangers that share no social relation.

Before initiating a connection, a user can message another user. Some social networking sites allow a restriction to this feature that gives the user an ability to ensure only current connections can make contact (Boyd & Ellison, 2007). Many sites require a mutual acceptance between two parties before allowing a connection to develop but some sites allow one user to ‘follow’ another without confirmation (Boyd & Ellison, 2007). Once two people become ‘friends’ or a ‘connection,’ communication can then take place as posting public messages on the individuals’ profile, commenting on their photos, sending private messages, real-time chatting, and/or sharing photos/videos (Raacke &

Bonds-Raacke, 2008). Some sites technological features may not allow for photo/video sharing. The details of variances for the social networking sites in this research are given in the following sections.

MySpace

MySpace was developed in 2003 as an adult social networking site. The primary technological difference that set MySpace apart from others was its allowance of users to fully customize and design their profile by adding HTML into the profiles forms (Boyd & Ellison, 2007). MySpace then became a strong networking tool for local and well-known musical artists. This “bands-and-fans” dynamic allowed bands to reach out to their fans and vice versa. Once this started, MySpace gained attention from the younger generation. To accommodate for this newly developed social networking demand, MySpace’s developers changed the user policy to allow minors (Boyd & Ellison, 2007). In 2006, there were accusations that sexual interactions were taking place between adults and minors, which prompted concerns of sexual predators (Bahney, 2006). Since 2003, MySpace has further developed its musical emphasis and has updated its social networking technologies to remain comparable to other social networking sites that are available.

A MySpace user can establish connections by typing in a name or traversing through current contacts’ connections. Contacting another user can involve requesting a connection and/or sending a private message before establishing a connection. Once a connection is made, the user can also comment on the other users’ profile, like a photo,

comment on a photo, and/or privately send a photo/or video. MySpace also hosts a mobile application for smartphones and tablets that allow for convenience of access.

Facebook

Facebook originated in 2004 as a social networking site for limited Universities. By 2005, many colleges, universities, high school students, and some corporations gained access (Cassidy, 2006). As of today, anyone over the age of 13 can create a Facebook account. Some jurisdictions may require this age to be higher. An appeal of Facebook is the use of applications that enhance one's profile (Boyd & Ellison, 2007). These applications include but are not limited to games, check-in, travel, birthdays, and gifting. Game applications allow for friends to play games together. Checking in shows what facility, store, and/or general location the user is at that moment. Travel gives the user the ability to place their travels on the world map for other users to see. Birthday notifications make a user aware of their 'friends' birthdays. Gifting gives a user the option to send a gift card or other object to another 'friend' for their birthday, Valentine's Day, or any other occasion.

The communication aspects of Facebook are like MySpace. A user can search for a user by name. Also, a user can view their current contacts other "friends." Unlike MySpace, Facebook does not allow its user's profiles to be completely public (Boyd & Ellison, 2007). Users can block users, limit their profile content that is shared, and review profile posts from other users before it is publicly accessible. Additionally, Facebook does allow a restriction where only current "friends" can "like," comment, or privately

message a user. As with MySpace, Facebook has a mobile application available for smartphones and tablets.

LinkedIn

LinkedIn, developed in 2003, diverges from MySpace and Facebook in its target audience. LinkedIn is considered a business-oriented social networking site that allows for communication and connection to corporate affiliates and information (LinkedIn, 2007). Users can upload their resume, as well as have all current and previous education, employment, and organizational affiliations listed. Just as with other social networking sites, there is a location for hobbies and interests. Additionally, an individual can post a message accessible to the public. The difference in the posting feature of LinkedIn is usually the content of the message. With Facebook, an individual may post a very common topic, i.e., “My car battery is dead again, I hate winter”; whereas, this style of post would not likely be seen on LinkedIn. The posts can be personal in nature, but more likely about one’s career, i.e., “Today marks three years I have been with (insert company name).” As with MySpace and Facebook, there is the ability to “like” and comment on these posts.

Typically, establishing a connection is targeted towards current or mutual organizations, corporations, and colleagues of association. Initially, this was referred to as the “gated-access” dynamic whereby connection to a third party required a pre-existing connection with a mutual contact of the two individuals (Papacharissi, 2009). However, a user can choose to have their contacts hidden from public view (Boyd & Ellison, 2007). Since the initial ‘gated-access’ concept was developed, it is now possible to search for

and connect with individuals outside of your immediate professional circle and send private messages. LinkedIn also hosts a mobile application for smartphone and tablet connectivity.

Social Impact of Social Networking Sites

The social impact of social networking sites is something that is researched in respect to content of users' profiles (Boyd & Heer, 2006; Pierce, 2007), characteristics of users versus nonusers (Hargittai, 2007; Raacke & Bonds-Raacke, 2008), and how the use of social networking sites affects psychological well-being (Bargh, McKenna, & Fitzsimmons, 2002; Ellison, Steinfield, & Lampe, 2007; Valkenburg et al., 2006). It has been found that the Internet and social networking sites are being utilized to form, not only, friendships and romances, but also to initiate affairs (Henline & Lamke, 2003; Hertlein & Piercy, 2006; Lumpkin, 2012; Schonfeld, 2008; Whitty, 2003, 2005). Recent research has highlighted the impact of social networking site infidelity, as well as its differences to online infidelity (Cravens & Whiting, 2013; Lumpkin, 2012). Minimal research is available on how social networking sites have impacted behavior and the instance of online infidelity.

In contrast to online activity, social networking interactions can be kept private due to password protection and increasingly simple access via computers and portable hand-held devices at both work and home without attracting much suspicion (Cravens & Whiting, 2013; Lumpkin, 2012). Which suggest common behaviors of online infidelity are now brought to a portable domain where discretion is more readily available.

Defining Infidelity

Infidelity has become a popular subject of attraction studies, evolutionary theory, and social theory. With different research parameters, differing views on what causes infidelity, inconclusive reasons for its occurrence, and variability on its definition, it remains a difficult topic to research (Blow & Hartnett, 2007). Throughout time, there have been changes within social dynamics that require amendments to previous work regarding what behaviors define infidelity.

For the first time, in 1948, social theorists identified infidelity as having two primary components: sexual and emotional (Kinsey, Pomeroy, Martin, & Gebhard, 1953). The research emphasis was on extra-marital sex, or ‘coitus,’ but the development of an emotional relationship during infidelity was recognized. Many years later, infidelity was identified by three categories: emotional involvement, sexual involvement, and “combined type” (Glass, 1981). Glass (1981) explained the “combined type” as the presence of both sexual and emotional involvement.

Sexual infidelity is defined as participating in sexual behaviors with someone other than the primary partner (Buss et al., 1992; Roscoe, Cavanaugh, & Kennedy, 1988; Shackelford & Buss, 1996; Yarab et al., 1998). These behaviors include, but are not limited to sexual attraction, sexual fantasies, flirting, petting, passionate kissing, sexual intercourse (Roscoe et al., 1988; Yarab et al., 1998). Humphrey (1987) postulated sexual infidelities as brief and lacking trust or self-disclosure between the two parties.

Emotional infidelity identifies as non-physical intimacy, or emotional bonding, and potentially falling in love with someone other than the primary partner (Buss et al.,

1992; Neuman, 2001). Some of these behaviors may present as withholding information from one's primary partner, lying to the primary partner, and/or having non-sexual fantasies of falling in love with another individual (Buunk, 1980; Roscoe et al., 1988; Yarab et al., 1998). Spending time with another person of the opposite sex outside of the primary relationship is another indication of emotional infidelity with behaviors, such as: studying, going to movies/events, having lunch/dinner, and/or spending large amounts of time communicating (Roscoe et al., 1988; Yarab et al., 1998). In contrast to sexual infidelity, emotional infidelity can endure for many years and is considered to have significant levels of interpersonal trust and self-disclosure (Humphrey, 1987).

When a partner engages in behavior that elicits a breach in a romantic relationship contract, whether it is sexual or emotional, infidelity has occurred (Jones & Hertlein, 2012). Some have argued emotional infidelity not to be as damaging as sexual infidelity (Shackelford & Buss 1997). Gender differences suggest women rate emotional infidelity as more distressing than sexual; whereas men rate perceived sexual infidelity as more distressing than emotional (Buss et al., 1992). However, one study suggests that men believe women are probably in love with another man when they have sex with him (Harris, 2004) which suggests, when rating emotional versus sexual infidelity, men automatically assume an emotional connection is already established once sex occurs. Further research may be beneficial into men's perception and evaluation of emotional infidelity.

Online communication behavior of people who have an offline partner

Research of online infidelity has suggested that online interactions have a harsher impact on relationships than viewing pornographic material (Yarab et al., 1998). The Internet allows for the development of romantic emotional and/or sexual relationships with the possible continuance of this relationship offline; whereas, with pornographic websites, the object of interest is not a 'real-life' threat (Yarab et al., 1998).

The anonymity and variety available online make the Internet an ideal location to explore sexual behavior (Barak & King, 2000, Bargh et al., 2002; Cooper & Griffith-Shelley, 2002). In fact, Barak and Fisher (1999) predicted cybersex alone would be a primary contributing factor of relationship distress. This prediction was made well before the possible emotional connection of online relationships was identified as being more significantly damaging than a sexual connection (Henline et al., 2007). The increases in online dating and infidelity both (Cooper, 2003; Hertlein & Piercy, 2006; Whitty 2005) suggest there is no longer only a threat of real-life extradyadic emotional and/or sexual encounters. Private emotionally and/or sexually intimate 'meetings' can occur unsuspectingly in the privacy of home, next to the primary offline partner, and potentially advance into a real-life rendezvous.' Thus, online activity appears to make infidelity a potential double threat to maintaining a monogamous relationship and has necessitated changes in defining infidelity.

Online intimacy, both emotional and sexual, was not initially perceived by researchers to constitute infidelity due to the lack of physical contact (Argyle & Shields, 1996; Collins, 1999). Meeting online provides an atmosphere where reciprocal self-disclosure can manifest and promote an intense emotional bond that potentially

undermines the primary offline relationship (Merkle & Richardson 2000). Whitty (2003) presented the first study to show there is, in fact, a real and authentic threat with online infidelity and that the imagery and perception of the online user are apparently enough to make it a reality. There is an assurance of secrecy the Internet seems to provide, where those participating in communications and/or cybersex have found an ease in telling private things, having sexual experiences, and ‘cheating’ with another individual online (Cohen, 2008; Jones, 2005; Treas & Giesen, 2000; Whitty 2005; Wysocki, 1998). Without being able to observe a person’s private online activity directly, the parameters of online infidelity were initially difficult to define.

Whitty (2005) suggested online infidelity as having three components: sexual infidelity, emotional infidelity, and the use of pornography (viewing of sexually explicit images and/or videos). Regarding online sexual infidelity, one will engage in private discussion of sexual fantasies, sexual chatting, and potentially exchange photographs to one another (Henline, & Harris, 2006; Yarab et al., 1998). Another primary characteristic of online sexual infidelity is masturbation and the achievement of sexual gratification (Durkin & Bryant, 1995; Henline & Harris, 2006; Yarab et al., 1998). Emotional online infidelity is designated as conversations of self-disclosure, personal issues, flirting, saying ‘I love you, and planning to meet offline (Henline & Harris, 2006; Yarab et al., 1998).

Emotional and/or sexual relationships commenced online are believed to be maintained predominantly online (Yarab et al., 1998). Wysocki & Childers (2011) found respondents to have more interest in furthering an initial online encounter into a real-life

partnership rather than remaining strictly online. Other studies have presented similar findings with a large proportion of online encounters resulting in offline meetings (Parks & Floyd, 1996; Parks & Roberts 1998; Whitty, 2003). An even higher majority of respondents had expressed their engagement in real-life sexual encounters with those they met online as a result of meeting offline (Wysocki & Childers, 2011). These above mentioned behaviors have been researched from online communication in general; none of the research has focused on social networking sites specifically.

Regarding online infidelity and social networking sites, the combination of the above online communication behaviors and social networking site specific behaviors identify as breaching offline fidelity. When an individual develops a social networking profile, omitting a relationship is a potential indication of infidelity (Cravens et al., 2013). Establishing friends or connections with an ex-partner or spouse, attractive members, and/or not allowing their current partner to be a friend/connection is a perceived indication of infidelity (Cravens et al., 2013). Referencing social networking behavior, sending private messages to a member of the opposite sex or attractive user and/or commenting on an attractive user's profile are new behaviors associated of online infidelity (Cravens et al., 2013). Of course, there is an argument for the criterion of defining attractiveness. What is considered attractive by one person will likely vary from what another individual would define as attractive. The perception of attractiveness is subjective and may need further evaluation. Cravens and colleagues (2013) evaluated respondents directly involved, as the victim, in online infidelity. It may be beneficial to further research how prominently others that have not been directly harmed by this

behavior perceive social networking behavior and if these views change once a relationship indiscretion has occurred.

Hesper and Whitty (2010) found that married couples agreed significantly with the criterion for online infidelity as initially distinguished by Whitty (2003). However, there seems to be a lack of communication between couples regarding these behaviors. There appears to be no dialogue between couples that establishes what online behaviors each partner expects and/or views as inappropriate. The assumption persists that the offline partner shares these same expectations within the relationship agreement without verbal confirmation (Hesper & Whitty, 2010). It seems to be common for this assumption to occur in a relationship. One partner may view omitting a relationship status as a privacy concern, whereas their partner may perceive this as a way of feigning relationship availability for other users. Thus, just as parents must discuss with their children about Internet boundaries, it seems to be a wise practice for partners to detail online relationship etiquette. As long as one partner in the relationship recognizes the behavior as a violation of their romantic relationship, a significant trauma has occurred (Argyle & Shields, 1996; Whitty, 2003). Violating vows, expectations, and agreements concerning exclusivity to the primary offline romantic relationship agreement due to an online emotional and/or sexual relationship can cause extensive and long-lasting consequences to the primary offline romantic relationship.

Consequences of Infidelity

Some consequences of online infidelity may present before admission of its occurrence. Again, studies have found emotional and sexual online infidelities were

equally significant and harmful to the offline romantic relationship (Whitty, 2003; Whitty, 2005). When a party engages in either form of online infidelity, they typically begin to neglect the primary offline relationship. The individual may begin changing their sleep patterns, demanding privacy, avoiding responsibilities within the offline relationship, lying, developing changes in personality, losing interest in sex, and/or having a general decline in time and effort spent in nurturing the offline relationship (Schneider, 2000; Young et al., 2000). A later study found the partner engaging in online infidelity would begin to share less time with, lose trust in, and lose esteem towards their offline partner (Whitty, 2005). Whitty's (2005) study suggests that the frequency of social networking site use would place more attention and energy into the online relationship which would then potentially result in withdrawing from and neglecting the primary offline relationship.

Once infidelity is confirmed, there will be new potential consequences for the primary offline relationship. In 2000, approximately 25% of offline couples, where online infidelity occurred, ended up separating or divorcing (Schneider, 2000). By 2011, Facebook alone was cited in 33% of divorce cases (Lumpkin, 2012). Identifying variables that predict online infidelity can assist in recognizing this behavior and potentially avoiding deterioration of a relationship.

Motivation for infidelity

Most studies regarding motivation for infidelity are germane to offline infidelity. Common themes of offline infidelity in current research are the significance of effect of an individual's permissive sexual values (Buss & Shackelford, 1997), marital

dissatisfaction (Glass & Wright, 1985), and personality traits (Buss & Shackelford, 1997; Buunk & van Driel, 1989; Schmidt & Buss, 2001) on the likelihood of engaging in infidelity. Glass and Wright (1988) questioned participants' motivation for engaging in infidelity in a hypothetical situation. The most common examined predictor is marital/relationship satisfaction.

In respect to online infidelity, theorists have directed attention to online sexual behavior. Cooper (1998) identified the 'Triple A' theory of online sexuality. Essentially, the online environment provides accessibility to sexual activities, such as, pornography, cybersex, and meeting others to hook-up, on millions of sites 24 hours a day. Cooper (1998) presented this theory before the presence of social networking sites. Accessibility is suggested as reaching beyond a person's immediate physical environment. There are more opportunities available to encounter individuals that one would likely ever encounter in real-life via social networking. Additionally, online activity is now ubiquitous with access at home, work, libraries, coffee shops, and with hand-held devices. Another factor Cooper (2000) identifies, the affordability of online sexual activity, relates to pornography and the ability to access sexually-explicit videos, pictures, and live chat/video with others for free (Cooper, 1998). Regarding social networking sites, many sites are free and allow for relationship development with people internationally. The final component of the 'Triple A' theory is anonymity (Cooper, 1998) and is probably the most alluring aspect of online sexuality and general activity. The identity of an individual can remain virtually anonymous if the individual so

chooses. Even in the social networking realm, a person can create an identity separate from their real-life identity.

The ‘ACE’ model of Internet compulsions was presented around the same time as the ‘Triple A’ theory (Young, 1998). Young (1998) highlighted the anonymity and convenience of online activity; their descriptions align with Cooper’s (1998) anonymity and accessibility variables, respectively. The component of the ‘ACE’ model that varied from the ‘Triple A’ theory was the ‘Escape’ of online activity (Young, 1998). ‘Escape’ emphasized an individual’s use of online activity to escape from reality (Young, 1998). Research has since found people use online communication and relationships to provide an “escape” from a dissatisfactory and/or unfulfilling relationship (Hertlein & Stevenson, 2010).

Since these fundamental theories of online activity, minimal studies have been carried out to explore predictors of online infidelity. Furthermore, there have been no studies or theories developed around predicting variables of online infidelity via social networking sites which leave this topic under-researched. This research evaluated four variables that are indicated in current literature as having some relationship to infidelity, offline and/or online.

Review of Variables

Relationship Satisfaction

Marital satisfaction has been the most commonly examined predictor of infidelity. Glass and Wright (1977) were the first to identify marital satisfactions association with infidelity when men reported more dissatisfaction early in the marital relationship and

women reported more dissatisfaction later. It was later indicated that women's sexual dissatisfaction was related to infidelity but men's infidelity was unrelated to marital sex (Petersen, 1983). Another study found men's dissatisfaction with marital sex is, in fact, associated with infidelity (Glass & Wright, 1977). Aside from this inconsistency, a review of 10 studies on infidelity found only one study that failed to show an association between infidelity and marital satisfaction (Thompson, 1984) which led Thompson (1984) to propose the 'deficit' model to explain infidelity. The 'deficit' model suggested that a sexual and/or emotional deficiency in the primary romantic relationship played a cardinal role in infidelities origin and maintenance (Thompson, 1984).

Since this review of the literature, studies have seemed to validate the 'deficit' model and widely suggest marital and relationship conflict will increase ones' desire to engage in infidelity (Buss & Shackelford, 1997; Prins, Buunk, & VanYpren, 1993). Respondents have even indicated a belief that their partners' low relationship satisfaction will lead to an affair (Weiderman & Allgeier, 1996). It is shown that infidelity is predicted by greater marital dissatisfaction (Treas & Giesen, 2000; Whisman, Gordon, & Chatav, 2007). Participants of one study that rated their relationship satisfaction as 'not too happy' were more likely to report extramarital sex (Atkins, Baucom, & Jacobson, 2001). Another 17-year study found infidelity to be, both a cause and consequence of marital dissatisfaction, which supports Thompson's (1984) findings (Previti & Amato, 2004).

Review of current literature in the area suggests abundant empirical evidence of marital/relationship dissatisfaction relating to infidelity. However, there have been

studies that have found no association (Blumstein & Schwartz, 1983; Spanier & Margolis, 1983). Additionally, some couple's therapists have proclaimed infidelity does not automatically imply a deficit in the primary relationship (Elbaum, 1981; Finzi, 1989). It is likely that relationship satisfaction is not the only variable to influence infidelity. Other factors likely interact with relationship satisfaction and exert their effects on moderating the relationship between marital satisfaction and infidelity. Hence, this research aimed to evaluate the additional variables: intensity of social networking site use, impulsivity, and permissive sexual values, separately, and as moderators of relationship satisfaction.

Although the current literature has related to offline infidelity, the empirical evidence of the association between marital/relationship satisfaction warrants evaluation from the domain of online infidelity. Where there is a greater opportunity to be unfaithful, people are more likely to do so (Treas & Giesen, 2000). The atmosphere of perceived secrecy provided by social networking sites provides such an opportunity, especially for those seeking attention and acceptance from others when their marriage/relationship is in an unsatisfactory place (Whisman et al., 2007; Wysocki & Childers, 2011). Social networking sites have been suggested as an escape and distraction from a relationship where one feels confined and/or restricted in some way (Cravens, 2013; Hertlein & Stevenson, 2010). Thus, this research intended to address this gap in the literature and determine a relationship, if any, between relationship satisfaction and the occurrence of online infidelity via social networking sites.

Intensity of Social Networking Site Use

Another speculated factor related to infidelity is the amount of time spent with ones' spouse and the person outside of the marriage (Hertlein & Piercy, 2006). When an individual begins to live a separate life, away from their significant other, the likelihood of cheating is suggested to increase (Blumstein & Schwartz, 1983). This variable, like relationship satisfaction, has been primarily studied from an offline perspective.

However, when an individual becomes increasingly active online, their offline activities and relationships receive less attention, both, emotionally and physically (Hertlein & Piercy, 2006; Widyanto & Griffiths, 2006). In fact, one study found that 42% of compulsive Internet users were engaging in online infidelity (Greenfield, 1999).

The secrecy within extramarital relationships contributes to the likelihood that it will become a preoccupation and thus more time may be devoted to its continuance (Wegner, Laneu, & Demitri, 1994). Moreover, the convenience allotted to carrying out these online extramarital relationships makes the time spent engaging in them relatively undetectable. Physically, the individual may be in the same household with their partner or even sitting right next to them watching television; mentally and emotionally, they can be on a computer, tablet, and/or handheld device that provide them a life outside of that primary relationship.

The role of the frequency of Internet use on online infidelity is not researched. It is speculated that the Internet is a host of potentially addictive and problematic online behaviors, such as auctions, stock trading, gambling, infidelity, and other sexual materials/services (Davis, 2001; Young, 1998). The online environment affords

anonymity, control over self-presentation, intimate self-disclosure, and the perception of diminished social risk (Turkle, 1995; Walther, 1996). These perceived advantages are more appealing than some users' reality. If there is distress in their offline life, some people are more likely to use the Internet to express themselves rather than with those they know offline (McKenna, Green, & Gleason, 2002; Wallace, 1999). People tend to invest in social relations where they are expected to acquire personal gains (Lin, 1999). The 'gains' referenced here relate to the online users' self-esteem, social support, and satisfaction of life (Bargh & McKenna, 2004; Shaw & Gant, 2002; Valkenburg et al., 2006). The social contact and reinforcement achieved online strengthen the desire to sustain a virtual presence which will result in spending more time online (Davis, 2001). Thus, increasing the time online will allay any potential loss or alienation of offline relationships (Bargh & McKenna, 2004; Kraut et al., 1998). None of this research has been specific to social networking site use or romantic relationships thereof. The current literature surrounding the frequency of Facebook use among college-aged participants implies that a person's self-esteem and satisfaction of life is positively correlated with the frequency of Facebook use (Ellison et al., 2007; Steinfeld, Ellison, & Lampe, 2008).

Current research regarding the frequency of online activity, and social networking, specifically, suggests online encounters can entice a user to maintain a virtual presence due to potential psychological benefits. Moreover, in times of distress, an individual may turn to online activity to mitigate the distress experienced in real-life. This does not imply the user must be in distress to engage in more frequent social networking activity; nor does a person experiencing personal distress signify they will use social

networking sites to alleviate this stress. The frequency of social networking site use is evaluated as a moderator of relationship satisfaction. Again, the current literature lacks the context of infidelity alone and does not evaluate the domain of social networking infidelity. The establishment of ties and establishing an online relationship of self-disclosure could be interpreted as emotional infidelity if the online user is in a committed relationship.

Impulsivity

Impulsivity, as it relates to infidelity, has not been evaluated independently from other personality traits and characteristics. Upon determining low conscientiousness and low agreeableness as a predictor of infidelity, Buss and Shackelford (1997) found these two personality traits shared the inability to delay gratification, a key component of impulsivity. Impulsivity is further defined as the failure to deliberate, and refrain from acting on, seemingly, automatic responses (Miyake, Friedman, Emerson, & Witzki, 2000). The deliberation referenced here is between the short-term ‘reward’ and the long-term effect. Davis (2001) has linked a lack of impulse control as a primary symptom of problematic Internet use. As stated, one facet of problematic Internet use is infidelity and sexual behavior online. Davis (2001) suggests engaging in problematic online behaviors, such as infidelity, will weaken ones’ ability to inhibit potentially damaging desires. It is possible that, inversely, someone high on impulsivity would be more inclined to pursue problematic online behaviors.

A cognitive process that involves impulsivity as a construct among many cognitive abilities is executive control. Executive control, as it relates to impulsivity, has

three primary cognitive functions: inhibition, task switching, and updating (Miyake et al., 2000). Inhibition is the suppression of dominant responses that can result in inappropriate behaviors; task switching refers to the ability to shift between tasks; updating is the active organization of present information and using that information for task performance (Miyake et al., 2000). Briefly, these three functions work together to control and structure self-regulatory behavior in a goal-directed fashion which includes the discretion towards ‘undesired’ impulses (Borkowski & Burke, 1996; Hofmann, Gschwender, Friese, Wiers, & Schmitt, 2008; Payne, 2005). This lack of self-regulating conduct was initially evaluated by presenting M & M chocolate candies to individuals that were dieting (Hofmann et al., 2008). Those with stronger executive control were found to not eat the M & M chocolate candies instead of their dietary goal (Hofmann et al., 2008). It was then postulated that individuals in a committed romantic relationship should be able to inhibit the urge to pursue a potential alternative partner with similar cognitive goal-direction towards maintaining a stable relationship (Pronk et al., 2011) which was confirmed when studies demonstrated the depletion of executive control and self-regulation being an influence on participants’ responses and behavior towards attractive alternative partners (Pronk et al., 2011; Ritter, Karremans, VanSchie, 2010). Although the link to impulsivity through executive control is weak, the component of acting on short-term desires despite of potential long-term effects reflects a principal characteristic of impulsivity.

A definite link between impulsivity and infidelity is inconclusive and under-researched, and has not been evaluated about online infidelity specifically. However, current literature above suggests a committed individual that scores higher on impulsivity

would be more likely to recognize an opportunity for an online, emotional and/or sexual, encounter with a prospective alternative partner. This same impulsive characteristic further challenges the cognitive appraisal of this opportunity. Where a person that has low impulsivity would evaluate this opportunity as being inappropriate and either avoid it or end the behavior, the highly impulsive person would likely continue to advance the relationship. Individual impulsivity and instance of online infidelity warrants further analysis. Thus, this research evaluated the role impulsivity has on online infidelity via social networking sites.

Permissive Sexual Values

Permissive sexual values are a group of beliefs and behaviors relating to a person's premarital and extramarital sexual behavior. When a person has stronger permissive sexual values, they likely have very lax views on premarital sexual activity and extramarital sex, also known as promiscuity (Treas & Giesen, 2000). Having permissive sexual values and/or displaying premarital permissive sexual behavior have been associated with an increased likelihood of engaging in infidelity (Feldman & Cauffman, 1999; Reiss, Anderson, & Sponaugle, 1980; Smith, 1994; Treas & Giesen, 2000). Trait theorists have identified psychoticism, which is low agreeableness and low conscientiousness, as involving permissive sexual attitudes and behaviors (Eysenck & Eysenck, 1971; Pinkerton & Abramson, 1996). Agreeableness is a personality trait characterized by the distinction of being methodical, deliberate, and purposeful or disorganized, hasty, and lazy (McCrae, 2004). Conscientiousness is defined as a contrast between people who are kind, cooperative, polite, trustworthy, unselfish, flexible, and

polite and those who are skeptical, uncooperative, unfriendly, and more self-involved (Sheese & Graziano, 2004). Buss and Shackelford (1997) presented research to show individuals possessing low agreeableness and low conscientiousness were more likely to engage in affairs within the first four years of marriage. It is further suggested that the characteristics of an individual with permissive sexual values allow them to more readily perceive alternative partners (Johnson, 1970; Maykovich, 1976). Thus, one's past sexual activity and experience allows for recognition of potential opportunities where emotional and/or sexual alternative relationships can develop.

Current literature is dated and lacks literature about online infidelity. However, social networking sites are identified as a viable opportunity for individuals to establish emotional and/or sexual alternative relationships. Thus, there is a potential correlation in which this research intended to identify if having permissive sexual values is significant to online infidelity via social networking sites. Additionally, there was an interest in identifying if permissive sexual values would enhance levels of impulsivity, which shares components of low conscientiousness and low agreeableness (Buss & Shackelford, 1997). This research examined if permissive sexual values exacerbate impulsivity, or vice versa, which would then impact the experience of online infidelity.

Summary

The online environment has become an essential networking tool within the United States which has seemed to increase the interest in online sexuality and infidelity among online users and researchers alike. Current literature has focused primarily on general online sexual activity, demographics of users, and consequences of online sexual

behavior on social relationships. Empirical evidence of online infidelity details what behaviors represent online infidelity and the demographics of those that choose to utilize the online medium for infidelity. Research of social networking site infidelity has focused on the social impact experienced by the primary offline partner and the consequences on the relationship. The current research, although beneficial, has left predicting variables of online infidelity, generally, and social networking site infidelity, specifically, underrepresented. Moreover, there is a lack of research about cognitions of individuals that engage in online infidelity, as well as, how these cognitions influence and maintain the behavior of online infidelity. Research has been abundant regarding attitudes and others' perceptions of online infidelity but needs more insight into the characteristics of those that have engaged in online infidelity directly.

Chapter 3: Methodology

Introduction

This chapter includes the purpose of the study, the research design, and methodology. The design of this study included research questions and hypotheses along with a description of the statistical approach for determining their outcome. Participants, population sampling, and the method of data collection is discussed along with the instruments of measure. The Relationship Assessment Scale (Hendrick, 1988), Short-form Barratt Impulsiveness Scale (Spinella, 2007), Brief Sexual Attitudes Scale (Hendrick et al., 2006), and Problematic Internet Use Questionnaire Short Form (Koroneczai et al., 2011) are introduced as questionnaires for data collection. Statistical analyses conducted with the collected data are described to establish a structure for answering the research questions and hypotheses. Ethical considerations for conducting this study are then addressed.

Purpose of the Study

The purpose of this study was to examine factors that predict the frequency of an individual engaging in online infidelity. I intended to identify characteristics, if any, amongst the population of individuals that have engaged or are engaging in online infidelity. Previous research is dated and lacks the role of the online environment on infidelity, collected from a population of college students, and focused mainly on perceptions of online infidelity. Wysocki and Childers (2011) presented research similar to this present study. Some of the variables Wysocki and Childers (2011) studied, and those of this study, have similar qualities as they are both concerned with online infidelity

specifically. However, Wysocki and Childers focused on the overt behavior of online infidelity and how the Internet is used to engage in online infidelity. My goal was to investigate the variables that predict online infidelity and to contribute to the current field of infidelity research and promote social change in marital, couples, and individual counseling. The results could possibly allow for therapists and social network users alike to recognize and avoid the potentially damaging behavior. Furthermore, a couples' awareness of behaviors may allow them to seek assistance and work together for a resolution.

Research Design and Approach

The research design was a cross-sectional online survey analyzed with multiple regression analysis. The purpose of this survey was to determine if a person's frequency of engagement in online infidelity is predictable by four variables: relationship satisfaction, the intensity of social networking site use, impulsivity, and permissive sexual values. I computed correlation tables to identify any relationships among the same four variables followed by multiple regression analysis to indicate the strength of the predictability, if any, that exists between the four variables. Moderating and mediating effects were evaluated using PROCESS regression analysis. PROCESS, developed by Hayes (2013), is an SPSS add-on statistical tool designed specifically for mediation, moderation, and conditional process analyses. Following these analyses, the separated data set of respondents that have not engaged in online infidelity was reintroduced for correlation and multiple regression analysis against those that endorse online infidelity.

I designed this study to satisfy the purpose of answering the research questions stated herein. I collected data using with pre-existing questionnaires that developers intended for use in the behavioral sciences. They all have demonstrated both reliability and validity (Graham, Diebels, & Barnow, 2011; Hendrick, 1988; Hendrick et al., 2006; Koronczai et al., 2011; Patton et al., 1995; Spinella, 2007). An online platform was used to present the measures.

I assessed behaviors of online users; therefore, all participants were online users. The only concern regarding the research design was the length of the cross-sectional survey. Although the questions did not require critical thinking, the number of questions may have deterred respondents. Upon collection of responses, I assessed demographic information and removed those results that were not within the target population. The primary emphasis of this research study was to evaluate the four dependent variables in relation to people that have engaged in online infidelity. For initial analysis, I removed the surveys for those respondents that denied online infidelity. However, those results were re-introduced later to compare how the four dependent variables differ between those that endorsed online infidelity and those that have not engaged in online infidelity via social networking site use.

Methodology

Participants

Participants consisted of a convenience sample of male and female adults that have online access. Participants were included in data analysis based on the following inclusion criteria: (a) they currently are or have been in a relationship where they

are/were cohabitating or married, (b) they are ≥ 21 years of age, and (c) they are or have been a member of a social networking site. The age restriction allowed for sufficient experience in a committed, or multiple committed, romantic relationships. This justification is due to findings that estimate the average age of marriage being over 21 years of age (Schoen & Standish, 2001). Participation in the survey was voluntary, and no incentives of any kind were provided or implied as being offered for participation.

Sample Size

With the method of data collection being self-selection, a precise number of participants were unavailable for accurate representation. Numbers derived from social networking site statistics estimate users to be in the millions (Schonfeld, 2008). Only the respondents that had engaged in online infidelity via social networking sites were the primary analysis. Cohen's statistical power was used to determine sample size (Cohen, 1988). The test for the multiple regression/correlation analysis is tested at $\alpha = .01$, a medium Effect Size which is $f^2 = .15$, and Power of .80 (Cohen, 1988). Four dependent variables were identified, which indicated a required sample size of $N = 118$ (Cohen, 1988). This projection is obtainable due to high response volumes that Internet surveys have yielded (Cooper et al., 2000; Whitty, 2003; Wysocki & Childers, 2011).

Research Setting

I conducted this study online with the use of a cross-sectional survey. Thus, the participants were in the comfort of their homes, office, library, or personal environment when they participated. The use of online research has been shown to alleviate social pressures (Sproull & Kiesler, 1991). The participants had the ability to exit the survey at

any time, as well as there were no time constraints on completing the survey which further minimized the pressure associated with survey completion.

Data Collections Procedures

Respondent recruitment was satisfied by (a) enlisting volunteers through Walden University's research participant recruitment; (b) posting on FindParticipants.com, an academic research recruitment site; and (c) posting a public message on designated social networking sites of interest: MySpace, Facebook, and LinkedIn, where permission for each social networking sites administrator was obtained prior to commencement. The act of communication is technologically similar on all of these specific social networking sites. I typed the content into a message or comment. Once posted, it was visible to all site users within their newsfeed. The message, or invitation, that I shared on all recruitment platforms and MySpace, Facebook, and LinkedIn to participate in the survey contained a brief explanation alongside the hyperlink to access the survey as follows:

Voluntary adult respondents are needed for psychological research pertaining to social networking site use and the development of social networking site relationships. Participation involves a brief multiple choice survey. There will be no self-identifying information disclosed to ensure confidentiality and anonymity.

This invitation to participate is available for review in Appendix A. Upon entry into the survey host site; there was a brief consent to participate. By acknowledgment of consent to participate in the research study, a 49-item survey began.

Access to complete the survey was available to anyone. However, only those participants that admitted online infidelity were included in final analysis. Initially, respondents were asked eight questions regarding gender, age, sexual orientation, relationship status, geographical location, and three questions related specifically to social networking site behavior. The full item list is available in Appendix B. I included these questions to ensure only respondents' data that were relevant to this study were included in the final data analysis. Then, the participants were administered a series of reliable and valid questionnaires: Relationship Assessment Scale (Hendrick, 1988), Barratt Impulsiveness Scale – 15 (Spinella, 2007), Brief Sexual Attitudes Scale (Hendrick et al., 2006), Problematic Internet Use Questionnaire – Short Form (Koronczai et al., 2011). With the use of PsychData, I transferred the data directly from the survey to SPSS for final analysis. Previous research (Wysocki & Childers, 2011) has utilized similar methodology with a successful outcome.

Instrumental Descriptions

Demographics

The initial portion of the survey contained questions about demographic information. There were five questions with a multiple-choice answer selection to determine gender, age, sexual orientation, relationship status, and country of residence. The list of items is available in Appendix B.

Social Networking Site Behavior

I used three questions about social networking site behavior in this research. The questions were: “How many times have you engaged in a romantic emotional and/or

sexual relationship with someone on a social networking site while you were in a committed romantic offline relationship (cohabitating or married)?” “Which of the following social networking sites have you used to meet the online partner(s)?” and “How many times have you attempted to engage in a romantic emotional and/or sexual relationship with someone on a social networking site while you were in a committed romantic offline relationship (cohabitating or married)?” The first question had multiple choice responses. The second question allowed respondents to select multiple answers. The final question had answers similar to a Likert-type scale. The questions and possible answers to these questions are presented in Appendix B.

Relationship Satisfaction

Relationship Assessment Scale (RAS). The RAS is a 7-item scale developed by Hendrick (1988) that measures general relationship satisfaction. For this study, there was a note at the start of this questionnaire stating the following: “The following seven questions concern the satisfaction of your offline relationship. When completing these questions, if you have engaged in online infidelity, please answer the questions as your satisfaction with the offline relationship at the time of your experience with online infidelity.” Once the participant began the questionnaire, the questions addressed marriage and other types of romantic relationships. Examples of items include, “How good is your relationship compared to most?” For a full list of items, refer to Appendix B.

The seven items are keyed on a 5-point Likert-type scale, ranging from 1 = “Low Satisfaction” to 5 = “High Satisfaction” (Hendrick, 1988). Scores from the Relationship Assessment Scale range from 7-35. Items 4 and 7 are to be reverse-scored. The item

score is based on an average (total score is divided by the number of scale items), where a higher average indicates greater satisfaction experienced in the participants' relationship. The Relationship Assessment Scale has yielded strong reliability scores averaging at .87 across studies (Graham et al., 2011). Although the assessment was originally designed for younger couples, it seems to be more reliable with scores of older couples (Graham et al., 2011).

Intensity of Social Networking Site Use

Problematic Internet Use Questionnaire Short Form (PIUQ-SF). The PIUQ-SF is a 9-item questionnaire that measures cognitions and behaviors related to Internet use and the effect it has on psychosocial health as defined by obsession, neglect, and control disorder. For this study, a previously developed short-form was used. The short-form is a 9-item self-assessment that measures the three components listed above by selecting the three highest loading questions from each (Koronczai et al., 2011). Furthermore, for this research, questions were modified to evaluate levels of problematic social networking site use among participants by replacing the word "Internet" or "online" with the words "social networking sites." One example of this is as follows: "How often do you try to conceal your time spent on social networking sites?" All items, with modification, are available for review in Appendix B.

Items are rated on a 5-point Likert-type scale, ranging from 1 = "Never" to 5 = "Always" (Demotrovics, Szeredi, & Rozsa, 2008). Final scores ranged from 9-45 with scores greater than or equal to 22 indicating a greater degree of intensity of social networking site use (Koronczai et al., 2011). The developers of the short form did not

evaluate the correlation of this measurement to its full version. The PIUQ-SF does have a significant internal consistency which is designated by Cronbach's alpha of .84 in adults (Koronczai et al., 2011). For future research, evaluation of the PIUQ-SF's psychometric properties may be beneficial.

Impulsivity

Barratt Impulsiveness Scale 15 (BIS-15). The Barratt Impulsiveness Scale (BIS) is a widely used 30-item self-assessment that measures impulsivity based on three components: non-planning, motor impulsivity, and attention impulsivity. For this study, I used a previously developed short-form of the BIS. This short-form is referred to as the BIS-15. The BIS-15 is a 15-item self-assessment that also measures the three components listed above by selecting the five highest loading questions from each (Spinella, 2007). Some of the items include: "I plan for the future" (non-planning – reversed scoring), "I do things without thinking" (motor), and "I don't pay attention" (attention). All items are available for review in Appendix B.

Items are rated on a 4-point Likert-type scale, ranging from 1 = "Rarely/Never" to 4 = "Almost Always" (Spinella, 2007). Six of the items have reversed scoring as they indicate lower impulsivity. Again, the scores were reversed before calculating. The final scores ranged from 15-75, where a higher score indicates the participant has a higher likelihood of displaying impulsivity as a character trait. Reliability testing of the BIS-15 yielded a Cronbach's alpha of .82 and scores from the BIS-15 correlated with the scores of the full-item BIS ($r = .94, p < .001$) (Spinella, 2007).

Permissive Sexual Values

Brief Sexual Attitudes Scale (BSAS). The Brief Sexual Attitudes Scale was originally a 49-item questionnaire. Hendrick and Hendrick (1987) chose to evaluate four variables: sexual permissiveness (casual, open attitude towards sex), sexual practices (responsibility and tolerant sexual attitudes), communion (evaluating sex as an ideal experience), and sexual instrumentality (sex being a biologically natural aspect of life). The scale is acceptable for all levels of committed romantic partners that are sexually active (Hendrick & Hendrick, 1987). For this study, the Permissiveness 10-item subscale of the 23-item BSAS was utilized. This removal of the subscale from the full-scale version does not compromise the scoring. Both, the original scale and BSAS use the mean scores from each of the four subscales individually with no overall score (Hendrick & Hendrick, 1987; Hendrick et al., 2006) which is due to the independent nature of each subscale (Hendrick & Hendrick, 1987). An example of items includes: “Casual sex is acceptable.” The full item list is presented in Appendix B.

The ten items are rated on a five-point Likert-type scale, ranging from 1 = “Strongly Agree” to 5 = “Strongly Disagree” (Hendrick et al., 2006). The item score is averaged (total score is divided by the number of scale items), where a lower average indicates a greater endorsement of permissiveness (Hendrick et al., 2006). The Goodness of Fit Index showed .95 for permissiveness subscale. The test-retest correlation for permissiveness was .92. Permission is granted by the developer to use this scale (Fisher, Davis, Yarber, & Davis, 2011).

Data Analyses

The instrumental measurements were available online for voluntary completion for four months. Following this time, the measures were appraised to guarantee all measurements had been fulfilled in their entirety. Some participants may have lost online connection or chose to leave the survey prematurely. Thus, any incomplete surveys were removed from the final analysis. Once incomplete or invalid surveys were eliminated, and appropriate data was collected, all data was transferred into software utilized for social science research known as Statistical Product and Service Solutions, more commonly referred to as SPSS, for further statistical analyses.

After transferring data into SPSS, there was an elimination of responses from participants that do not represent the intended population. For example, if individuals outside of the United States or those younger than 21 years of age are identified, these responses and data sets were eliminated to avoid skewing final analysis. A subsequent elimination then took place to remove those respondents that have not engaged in online infidelity. The data that remained following this process was then statistically evaluated using the SPSS software.

Correlation tables were computed to identify any relationships among the following four variables: relationship satisfaction, the intensity of social networking site use, impulsivity, and permissive sexual values. Multiple regression analysis was then conducted to indicate the strength of the predictability, if any, that exists between the above mentioned four variables. The purpose of this survey was to indicate if a person's engagement in online infidelity can be predicted by four variables: relationship satisfaction, the intensity of social networking site use, impulsivity, and permissive

sexual values. With the utilization of PROCESS, regression analysis was then executed to evaluate moderating and mediating effects. After completion of these analyses, the previously removed data set of respondents that denied online infidelity was re-introduced for multiple regression and correlation analysis against those endorsing online infidelity. The specific research questions and hypotheses that were assessed are as follows:

RQ1: Is relationship satisfaction the best predictor of the frequency of engaging in online infidelity when intensity of social networking site use, impulsivity, and permissive sexual values are competing dependent variables?

H₀₁: Relationship satisfaction is not the best predictor of the frequency of engaging in online infidelity when analyzed against intensity of social networking site use, impulsivity, and permissive sexual values.

H_{a1}: Relationship satisfaction is the best predictor of the frequency of engaging in online infidelity when analyzed against intensity of social networking site use, impulsivity, and permissive sexual values.

RQ2: Is there a difference between those who have engaged in online infidelity and those who have not engaged in online infidelity based on the following variables: relationship satisfaction, impulsivity, intensity of social networking site use, and/or permissive sexual values?

H₀₂: There is not a difference between those who have engaged in online infidelity and those who have not engaged in online infidelity based on the

following variables: relationship satisfaction, impulsivity, intensity of social networking site use, and/or permissive sexual values.

H_{a2}: There is a difference between those who have engaged in online infidelity and those who have not engaged in online infidelity based on the following variables: relationship satisfaction, impulsivity, intensity of social networking site use, and/or permissive sexual values.

RQ3: Does impulsivity moderate the relationship between relationship satisfaction and the frequency of engaging in online infidelity?

H₀₃: Impulsivity does not moderate the relationship between relationship satisfaction and the frequency of engaging in online infidelity.

H_{a3}: Impulsivity does moderate the relationship between relationship satisfaction and the frequency of engaging in online infidelity.

RQ4: Does social networking site use moderate the relationship between permissive sexual values and the frequency of engaging in online infidelity?

H₀₄: Social networking site use does not moderate the relationship between permissive sexual values and the frequency of engaging in online infidelity.

H_{a4}: Social networking site use does moderate the relationship between permissive sexual values and the frequency of engaging in online infidelity.

RQ5: Does social networking site use mediate the relationships between relationship satisfaction and the frequency of engaging in online infidelity?

H₀₅: Social networking site use does not mediate the relationship between relationship satisfaction and the frequency of engaging in online infidelity.

H_a5: Social networking site use does mediate the relationship between relationship satisfaction and the frequency of engaging in online infidelity.

Factors Jeopardizing Internal and External Validity

The research design presented some threats to the validity of this research. A threat to the internal validity compromised the confidence in stating a relationship exists between the dependent and independent variables. The study did not occur over an extended period nor did an observation of changes in testing performance or behaviors occur over time; thus, many of traditional validity concerns were minimized. The main concern for this research was the Hawthorne effect, also known as the John Henry effect. When a person is being evaluated or tested in an experimental setting, they become aware of their performance or responses. Regarding this research, one may have become aware of their responses and how they may have looked unfavorable. Therefore, a respondent may have provided incorrect responses to avoid presenting themselves in a way they perceived as negative or a fault of their character and was intended to be minimized by ensuring anonymity.

A threat to the external validity compromised the confidence in saying the results of this study can be generalized to other populations. This study may be difficult to generalize to other groups due to the specificity of variables and population of interest. It may be possible to generalize the results to other social networking sites that were not evaluated.

Ethical Considerations

The research design and methodology took into account the potential effect on the physical and/or psychological health of research participants. With this study gathering data from adults within an online survey, there were risks involved. With any online research, it is hard to assess the participant for understanding as well as their personal reactions to the material (Bersoff, 2008). Some participants may find the material brings up unpleasant memories or leads to insight into unpleasant information about them (Nosek, Banaji, & Greenwald, 2002). These concerns were taken into consideration.

The way this study was set up did not pose any more than a minimal psychological and/or emotional risk to the participant. There was no personally identifiable material being elicited in the survey. The beginning of the study had a brief disclaimer that the adult participant simply clicked “agree” to enter the survey with the understanding they had the ability to withdraw at any time. Considering this research posed minimal risk involving adults online, the IRB had the capacity to waive requirements for written documentation of informed consent (Bersoff, 2008). Again, the information gathered, within the surveys, did not contain personally identifying information. Upon completion of the survey, there was no need for a debriefing due to the confidential nature of the study. However, once the survey was submitted, a pop-up message briefly explained the nature of the survey and how the results will be utilized. With all of the ethical considerations addressed, the study was carried out ethically, with minimal concern for any physical and/or psychological harm to the participants.

Summary

The methodology clarified herein reflects a study design that answers the research questions while maintaining ethical standards. Potentially identifying predicting variables of the frequency of engaging in online infidelity was accomplished by analyzing the data collected from the minimal 97 survey respondents. The collaborative survey comprised of the four reliable and valid measures: Relationship Assessment Scale (Hendrick, 1988), Barratt Impulsiveness Scale – 15 (Spinella, 2007), Brief Sexual Attitudes Scale (Hendrick et al., 2006), Problematic Internet Use Questionnaire – Short Form (Koronczai et al., 2011) were employed for data collection. The procedures of respondent recruitment and the ethical considerations for the administration of the survey are outlined within this chapter. Once the surveys were complete, the data was analyzed with SPSS software for the strength of predictability, as well as, some individual mediating and moderating effects. The accurate interpretation of this study will provide insight into variables of a person that may potentially predict the likelihood of engaging in online infidelity. This knowledge will then be able to serve individuals, professional counselors, and potentially improve counseling procedures.

Chapter 4: Data Analysis

Introduction

The purpose of this research study was to identify the predictors of engagement in online infidelity based on four dependent variables: relationship satisfaction, impulsivity, permissive sexual values, and intensity of social networking site use. As presented in Chapter 2, the current literature suggests these four variables have some relationship with an individuals' engagement in infidelity (offline and/or online). The respondents were online users, 21 years of age and older, residing within the United States (U.S. Virgin Islands included). This was a single-phase, 120-day study using quantitative methods. A 49-item cross-sectional online survey, which included four previously utilized instruments, was employed for data collection.

This chapter describes the analyses I conducted to test the research questions and hypotheses. I then discussed descriptive statistics for the variables included in this study, as well as, scale reliability for item measurements. Next, I present results of correlation and multiple regression analyses. Finally, this chapter concludes with a summary of analyses and findings as they relate to the research questions and hypotheses.

Data Collection

Response Rate to the Survey Research

Of the original 177 respondents who took the survey, 12 were removed due to geographical location, six refused the terms and conditions of the study, 23 provided only partial data. Thus, data from these respondents were not included in the final analysis. The final sample included 136 respondents, 21 years of age and older, who reside in the

United States and the U.S. Virgin Islands, which yielded a completion rate of 77%. The following section provides descriptive statistics about the sample, items used for the study, the dependent variables, and the independent variables.

Data Analysis Procedures

Upon my completion of data collection, I executed analyses using SPSS, Version 23.0 for Windows software. I then computed correlation tables to identify any significant relationships between variables. Statistically, significant relationships were determined based on an alpha level of .05 or less.

Demographic Data

Some survey items were included to provide demographic information of the sample population. These items included age, gender, and sexual orientation. Below, Table 1 presents the frequency and percentage of these variables based on the entire sample population. Age is measured as an ordinal variable, which asked respondents to record their age based on ranges provided. Gender is measured as a nominal variable, indicated as “male,” “female,” or “decline to respond.” Sexual orientation is identified as a nominal variable, where respondents were asked to identify as “homosexual,” “heterosexual,” “bisexual,” or “decline to respond.”

Table 1

Descriptive Statistics for Sample Demographics (N=136)

Variable	<i>n</i>	%
Age		
21-24	9	7%
25-29	22	16%

(continued)

Variable		<i>n</i>	%
Gender	30-39	42	31%
	40-49	25	18%
	>50	38	28%
Sexual Orientation	Male	33	24%
	Female	103	76%
	Decline	0	0%
Relationship Status	Heterosexual	120	88%
	Homosexual	6	4%
	Bisexual	7	5%
	Decline	3	2%
Relationship Status	Single	31	23%
	Partnered	27	20%
	Married	57	42%
	Divorced	17	12%
	Widowed	4	3%

Table 2 indicates the respondents' engagement in online infidelity via social networking site use. Most respondents in the sample reported they had not engaged or attempted online infidelity (46%). About one-third of the sample admitted engagement (28%) or attempting to engage (26%) in online infidelity via social networking site use. For subsequent analyses, a decision needed to be made regarding combining those respondents admitting engagement or attempting to engage in online infidelity via social networking site use. I theorized that the groups would present similar characteristics of relationship satisfaction, impulsivity, permissive sexual values, and intensity of social networking site use. Those indicating an attempt to engage in online infidelity via social networking site use would possess similar motivators as those who admit to engaging in online infidelity.

Table 2

Descriptive Statistics for Engagement in Online Infidelity (N=136)

Variable	<i>n</i>	%
Have Attempted	36	26%
Have Engaged	38	28%
Have Not Attempted/Engaged	62	46%

Four independent samples *t*-tests were conducted to compare those who have attempted to engage in online infidelity and those who have engaged in online infidelity. The analysis included the following dependent variables: relationship satisfaction, impulsivity, permissive sexual values, and intensity of social networking site use. A significant difference was found on scores for permissive sexual values between those respondents that have attempted ($M = 3.89$, $SD = 1.01$) and those that have engaged ($M = 2.97$, $SD = 1.28$); $t(72) = 3.40$, $p = .001$. Low scores on this scale reflect those respondents admitting engagement in online infidelity expresses significantly higher levels of permissive sexual values when compared to those respondents who admit attempting to engage in online infidelity via social networking site use. No other significant differences were found on the other three dependent variables. With one significant difference found, the two groups were not combined for analyses.

Table 3 provides demographic data of each group separately based on frequency and percentage. Of the respondents, approximately 75% or greater were female. Many of the respondents for engaging in online infidelity (79%) were 30 years of age and older.

Those respondents attempting to engage in online infidelity had higher percentages of single (36%) and divorced (19%) respondents when compared to the other two groups.

Table 3

Descriptive Statistics for Sample Demographics (N=136)

Variable	Attempted Infidelity (n=36)		Engaged in Infidelity (n=38)		Have Not Attempted or Engaged (n=62)	
	n	%	n	%	n	%
Age						
21-24	1	3%	4	10.5%	4	6%
25-29	9	25%	4	10.5%	9	15%
30-39	9	25%	11	29%	22	35%
40-49	6	17%	10	26%	9	15%
>50	11	30%	9	24%	18	29%
Gender						
Male	6	17%	10	26%	17	27%
Female	30	83%	28	74%	45	73%
Decline	0	0%	0	0%	0	0%
Sexual Orientation						
Heterosexual	34	94%	28	74%	58	93%
Homosexual	0	0%	4	10%	2	3%
Bisexual	0	0%	6	16%	1	2%
Decline	2	6%	0	0%	1	2%
Relationship Status						
Single	13	36%	6	16%	12	19%
Partnered	4	11%	12	32%	11	18%
Married	10	28%	16	42%	31	50%
Divorced	7	19%	4	10%	6	10%
Widowed	2	6%	0	0%	2	3%

Table 4 contains the description of the item measurement for each variable and the average score for each group. Appendix C contains descriptive statistics for individual items from each instrument by dependent variable.

Table 4

Descriptive Statistics for Dependent Variables (N=136)

Variable	Attempted Infidelity (n=36)		Engaged in Infidelity (n=38)		Have Not Attempted or Engaged (n=62)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Relationship Satisfaction (RAS)	2.97	0.70	3.11	1.11	3.63	1.22
Impulsivity (BIS)	33.31	6.30	34.13	6.85	32.27	7.27
Permissive Sexual Values (BSAS)	3.89	1.01	2.97	1.28	3.58	1.12
Intensity of Social Networking Site Use (PIUQ)	18.75	9.80	18.37	8.70	15.71	6.96

Note. RAS average score = 1.00 (Low Satisfaction) to 5.00 (High Satisfaction); BIS total score = 9.00 (Low Impulsivity) to 45.00 (High Impulsivity); BSAS average score = 1.00 (High Permissiveness) to 5.00 (Low Permissiveness); PIUQ total score = 9.00 (Low SNS Use) to 45.00 (High SNS Use).

Instrumental Measurement Reliability Analysis

Cronbach's alpha measures the internal consistency of an instrument. The overall reliability of each instrument is available below in Table 5. Each instrument presents good to strong reliability with alpha coefficients ranging from 0.75 to 0.93.

Table 5

Instrument Reliability

Instrument	<i>N</i> /items	α
Relationship Assessment Scale	7	0.90
Barrett Impulsiveness Scale – 15	15	0.76
Brief Sexual Attitudes Scale	10	0.93
Problematic Social Networking Site Use Scale	9	0.93

Results**Research Question 1**

Is relationship satisfaction the best predictor of the frequency of engaging in online infidelity when the intensity of social networking site use, impulsivity, and permissive sexual values are competing dependent variables? Because I determined that those that have attempted and those that have engaged in online infidelity are in two separate groups, analysis was conducted on these two groups separately to identify the strongest predictor, if one exists, on the frequency of attempting to engage and the frequency of engaging in online infidelity.

I completed an initial examination of data where an analysis of standard residuals was first carried out on the data to identify any outliers, which showed that the data contained no outliers (*Std. Residual Min* = -1.24, *Std. Residual Max* = 2.67). Tests to see if the data met the assumption of collinearity indicated that multicollinearity was not a concern (*Relationship Satisfaction*, *Tolerance* = 1.00, *VIF* = 1.00; *Impulsivity*, *Tolerance* = .98, *VIF* = 1.02; *Permissive Sexual Values*, *Tolerance* = .89, *VIF* = 1.13; *Intensity of Social Networking Site Use*, *Tolerance* = 1.00, *VIF* = 1.00). The scatterplot of standardized residuals show the data met the assumptions of homogeneity of variance and linearity. The normal P-P plot of standardized residuals show points that are not completely on the line, but close, which indicates the data contains approximately normally distributed errors. Both corresponding scatterplots are presented in Appendix E. Finally, the data met the assumption of nonzero variances (*Relationship Satisfaction*, *Variance* = 1.23; *Impulsivity*, *Variance* = 46.93; *Permissive Sexual Values*, *Variance* = 1.65; *Intensity of Social Networking Site Use*, *Variance* = 75.70; *Times Engaged*, *Variance* = 1.63).

I executed a stepwise multiple regression analysis to examine if the frequency of engaging in online infidelity via social networking site use could be best predicted by relationship satisfaction when impulsivity, permissive sexual values, and the intensity of social networking site use are competing dependent variables. Using the stepwise method I found that relationship satisfaction and the intensity of social networking site use levels explain a significant amount of the variance in the frequency of engagement in online infidelity via social networking site use [$F(2, 35) = 7.98, p = .001, R^2 = .31, R^2_{Adjusted} = .27$]. Based on the results, 31% of the variance of the frequency of engaging in online infidelity via social networking site use is accounted for by relationship satisfaction and intensity of social networking site use. The analysis shows relationship satisfaction [$\beta = .43, t(37) = 3.07, p = .004$] and the intensity of social networking site use [$\beta = .36, t(37) = 2.57, p = .02$] significantly predict the frequency of the engagement in online infidelity via social networking site use. However, impulsivity [$\beta = .10, t(37) = .70, p = .55$] and permissive sexual values [$\beta = -.16, t(37) = -1.09, p = .28$] did not add to the prediction of the frequency of engaging in online infidelity via social networking site use.

Just as with the previous group, I first examined data prior to analysis. An analysis of standard residuals was carried out on the data to identify any outliers, which showed that the data contained no outliers (*Std. Residual Min* = -1.23, *Std. Residual Max* = 2.66). Tests to see if the data met the assumption of collinearity indicated that multicollinearity was not a concern (*Relationship Satisfaction, Tolerance* = .97, *VIF* = 1.03; *Impulsivity, Tolerance* = 1.00, *VIF* = 1.00; *Permissive Sexual Values, Tolerance* = .95, *VIF* = 1.06; *Intensity of Social Networking Site Use, Tolerance* = .74, *VIF* = 1.35). The scatterplot of

standardized residuals show the data met the assumptions of homogeneity of variance and linearity. The normal P-P plot of standardized residuals show points that are closely allied with the line, which indicates the data contains approximately normally distributed errors. Scatterplots are available for review in Appendix E. Finally, the data met the assumption of non-zero variances (*Relationship Satisfaction*, *Variance* = .49; *Impulsivity*, *Variance* = 39.70; *Permissive Sexual Values*, *Variance* = 1.02; *Intensity of Social Networking Site Use*, *Variance* = 95.96; *Times Attempted*, *Variance* = .34).

I executed a multiple regression analysis on the group admitting attempts to engage in online infidelity. This analysis was to examine if the frequency of attempting to engage in online infidelity via social networking site use could be best predicted based on relationship satisfaction when impulsivity, permissive sexual values, and intensity of social networking site use are competing dependent variables. Using the stepwise method it was found that impulsivity levels explain a significant amount of the variance in the frequency of engagement in online infidelity via social networking site use [$F(1, 34) = 7.98, p = .04, R^2 = .12, R^2_{Adjusted} = .10$]. Based on the results, 12% of the variance of the frequency of attempting to engage in online infidelity via social networking site use is accounted for by impulsivity. The analysis shows impulsivity [$(\beta = .35, t(35) = 2.19, p = .04)$] significantly predict the frequency of attempting to engage in online infidelity via social networking site use. However, relationship satisfaction [$(\beta = -2.04, t(35) = 2.19, p = .04)$], permissive sexual values [$(\beta = -.20, t(35) = -1.24, p = .22)$] and the intensity of social networking site use [$(\beta = .09, t(35) = .47, p = .64)$] did not add to the prediction of the frequency of attempting to engage in online infidelity via social networking site use.

Research Question 2

Is there a difference between those who have engaged in online infidelity and those who have not engaged in online infidelity based on the following variables: relationship satisfaction, impulsivity, intensity of social networking site use, and/or permissive sexual values? Given the prior analyses showing attempted and engaged could not be combined, the research question will now address three groups.

For this specific research question, my intent was to identify any differences in the four dependent variables between groups. Based on a one-way ANOVA, presented in Table 6, there were significant differences found between groups on relationship satisfaction, $F(2, 133) = 5.22, p = .007$, and on permissive sexual values, $F(2, 133) = 6.27, p = .003$.

To discern where differences were among three groups, I conducted post hoc analyses using Bonferroni. This analysis indicates that relationship satisfaction was significantly lower for participants attempting to engage ($p = .01$) when compared to those participants that have not attempted nor engaged in online infidelity via social networking site use. Post-hoc analyses using Bonferroni tests indicated that permissive sexual values were higher for participants that have engaged in online infidelity via social networking site use than for participants that have attempted to engage ($p = .002$) and those denying attempting nor engaging in online infidelity via social networking site use ($p = .03$). See Table 7.

Table 6

One-Way ANOVAs Between Groups (Attempted, Engaged, & Have Not Engaged)

Variable Source	df	SS	MS	F	<i>p</i>
Relationship Satisfaction					
Between Groups	2	12.01	6.01	5.22	0.007*
Within Groups	133	153.02	1.15		
Total	135	165.03			
Impulsivity					
Between Groups	2	84.09	42.04	0.88	0.42
Within Groups	133	6346.32	47.72		
Total	135	6430.40			
Permissive Sexual Values					
Between Groups	2	16.37	8.18	6.27	0.003*
Within Groups	133	173.63	1.31		
Total	135	189.99			
Intensity of Social Networking Site Use					
Between Groups	2	275.63	137.81	2.01	0.14
Within Groups	133	9114.37	68.53		
Total	135	9389.99			

*Analysis significant at the 0.05 level.

Table 7

Descriptive Statistics of One-Way ANOVAs Between Groups

Variable Source	<i>M</i>	<i>SD</i>
Relationship Satisfaction		
Have Attempted Infidelity	2.97 ^a	0.70
Have Engaged in Infidelity	3.11	1.11
Have not Attempted or Engaged	3.63 ^a	1.22
Impulsivity		
Have Attempted Infidelity	33.31	6.30
Have Engaged in Infidelity	34.13	6.85
Have not Attempted or Engaged	32.27	7.27
Permissive Sexual Values		
Have Attempted Infidelity	3.89 ^c	1.01
Have Engaged in Infidelity	2.97 ^{cd}	1.28
Have not Attempted or Engaged	3.58 ^d	1.12

(continued)

Variable Source	<i>M</i>	<i>SD</i>
Intensity of Social Networking Site Use		
Have Attempted Infidelity	18.75	9.80
Have Engaged in Infidelity	18.37	8.70
Have not Attempted or Engaged	15.71	6.96

Note. Means sharing a superscript are significant at the 0.05 level.

Research Question 3

A two-tailed bivariate correlation analysis was conducted to evaluate the degree of the relationships between those admitting online infidelity via social networking site use, their number of times engaging, and their item scores. The resulting analysis is available in Table 8. This table was referenced for analysis of the final three research questions.

Table 8

Correlation Analysis of Respondents' Engaging in Online Infidelity (N=38)

Variable	1	2	3	4	5
1. Relationship Satisfaction	-				
2. Impulsivity	0.13	-			
3. Permissive Sexual Values	-0.34*	0.03	-		
4. Intensity of SNS Use	-0.004	-0.02	-0.11	-	
5. Frequency of Infidelity	0.43**	0.15	-0.33*	0.36*	-

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

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

Because prior analyses found those having attempted to engage in online infidelity were to remain a separate group, analyses for the final three research questions will be executed on this group as well. Table 9 presents results of a two-tailed bivariate correlation analysis evaluating the degree of the relationships between those admitting attempting to engage in online infidelity via social networking site use, their number of

times attempting, and their item scores. This analysis was referenced for the final three research questions.

Table 9

Correlation Analysis of Respondents' Attempting to Engage in Online Infidelity (N =36)

Variable	1	2	3	4	5
1. Relationship Satisfaction	-				
2. Impulsivity	-0.17	-			
3. Permissive Sexual Values	-0.13	-0.23	-		
4. Intensity of SNS Use	-0.01	0.51**	-0.15	-	
5. Frequency of Attempts	-0.05	0.35*	-0.27	0.24	-

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

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

Research Question 3

Does impulsivity moderate the relationship between relationship satisfaction and the frequency of engaging in online infidelity?

For analysis of those admitting engagement in online infidelity, the following model is used:

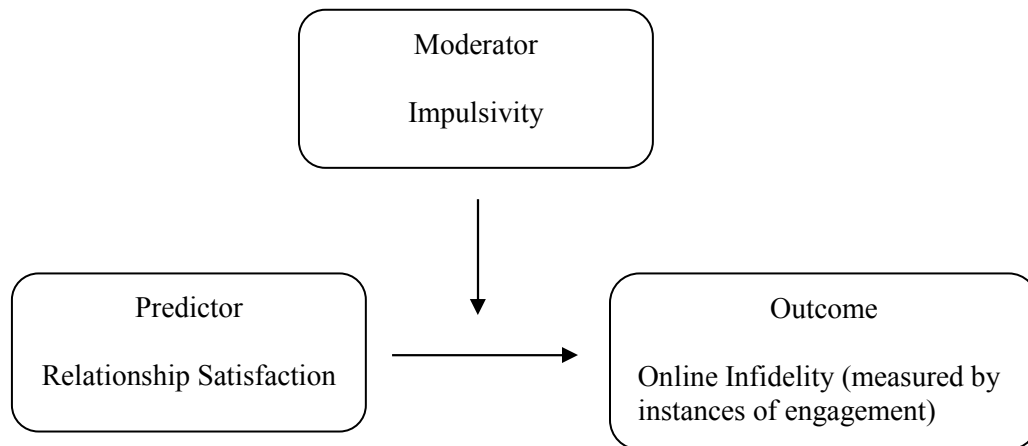


Figure 1. This figure illustrates the moderating effect analyzed.

Based on the correlation presented in Table 8, there is a significant relationship between the frequency of online infidelity and relationship satisfaction, $r(38) = .43, p = .01$. Although there is no significant relationship found between instances of online infidelity and impulsivity, there may be an interaction between impulsivity and relationship satisfaction that influences the significance between relationship satisfaction and frequency of online infidelity.

I performed a simple moderator analysis using PROCESS. The outcome variable for the analysis was the number of times engaged in online infidelity via social networking site use. The predictor variable was relationship satisfaction. The moderator variable evaluated for the analysis was impulsivity. The interaction between relationship satisfaction and impulsivity was not found to be statistically significant [$\beta = -.0078, 95\% \text{ CI } (-.0302, .0146), p > .05$].

The following model is used for analysis of those admitting attempting to engage in online infidelity:

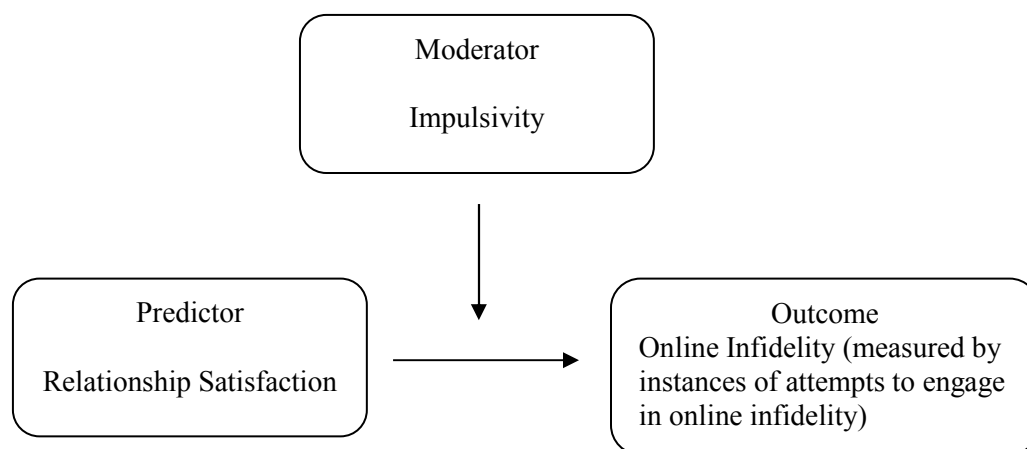


Figure 2. This figure illustrates the moderating effect analyzed.

Based on the correlation presented in Table 9, there is not a significant relationship between the frequency of attempting online infidelity and relationship satisfaction, $r(36) = -0.05$, n.s. A simple moderator analysis was performed using PROCESS. The outcome variable for the analysis was the number of times attempting to engage in online infidelity via social networking site use. The predictor variable was relationship satisfaction. The moderator variable evaluated for the analysis was impulsivity. The interaction between relationship satisfaction and impulsivity was not found to be statistically significant [$\beta = -.0185$, 95% CI (-.0455, .0085), $p > .05$].

Research Question 4

Does social networking site use moderate the relationship between permissive sexual values and the frequency of engaging in online infidelity?

Analysis of those admitting engagement in online infidelity used the following model:

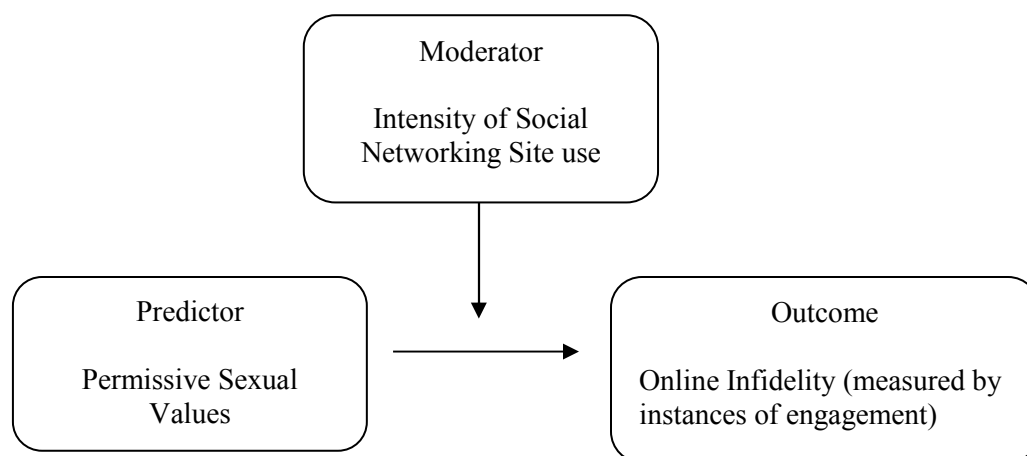


Figure 3. This figure illustrates the moderating effect analyzed.

The fourth research question sought to identify whether ones' intensity of social networking site use impacted the relationship between permissive sexual values and the frequency of online infidelity via social networking site use. Based on the correlation presented in Table 8, there is a significant association between the frequency of online infidelity and permissive sexual values, $r(38) = -.33, p < .05$. There is also a significant relationship found between frequency of online infidelity and intensity of social networking site use, $r(38) = .36, p < .05$.

I performed a simple moderator analysis using PROCESS. The outcome variable for the analysis was the number of times engaged in online infidelity via social networking site use. The predictor variable was permissive sex values. The moderator variable evaluated for the analysis was the intensity of social networking site use. The interaction between permissive sex values and intensity of social networking site use was not found to be statistically significant [$\beta = -.0159, 95\% \text{ CI } (-.0336, .00018), p > .05$].

Analysis of those admitting attempting to engage in online infidelity use the following model:

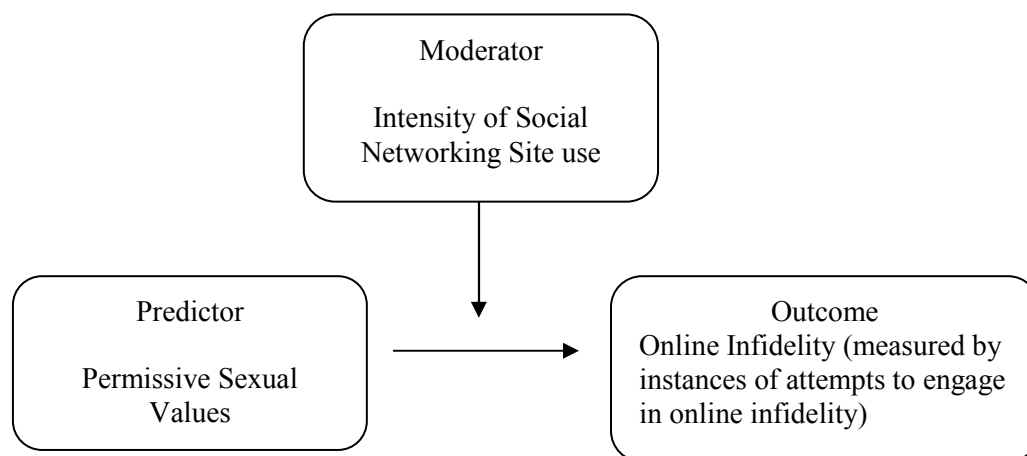


Figure 4. This figure illustrates the moderating effect analyzed.

Based on the correlation presented in Table 9, there is not a significant relationship between the frequency of attempting online infidelity and permissive sexual values, $r(36) = -0.27$, n.s. There is also no significant relationship found between frequency of attempting online infidelity and the intensity of social networking site use, $r(36) = 0.24$, n.s.

A simple moderator analysis was performed using PROCESS. The outcome variable for the analysis was the number of times attempted to engage in online infidelity via social networking site use. The predictor variable was permissive sex values. The moderator variable evaluated for the analysis was the intensity of social networking site use. The interaction between permissive sex values and the intensity of social networking site use was found to be statistically significant [$\beta = -.0240$, 95% CI (-.0376, -.0104), $p < .05$]. These results identify the intensity of social network use as a moderator of the relationship between permissive sex values and attempting online infidelity via social networking site use. Due to reverse scoring, a decrease in this value represents an actual increase in permissive sexual values. Thus, this suggests, as the intensity of social networking site use increases, the difference in permissive sexual values increases as well. More specifically, as the intensity of social networking site use increases by one unit, permissive sexual values present and increase by .02 units.

Research Question 5

Does social networking site use mediate the relationships between relationship satisfaction and the frequency of engaging in online infidelity?

The following model is used for analysis of those admitting engagement in online infidelity:

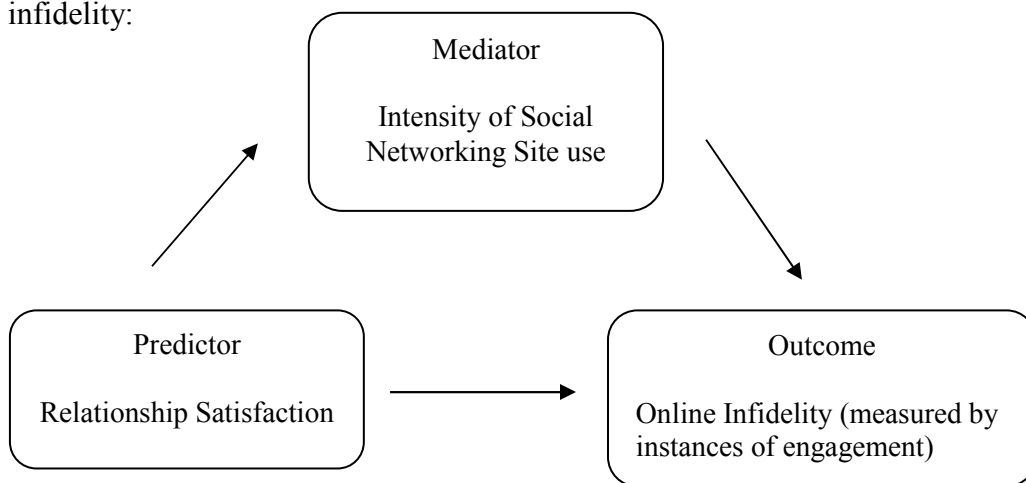


Figure 5. This figure illustrates the mediating effect analyzed.

I performed a simple mediation performed using PROCESS. The outcome variable for the analysis was the number of times engaged in online infidelity via social networking site use. The predictor variable was relationship satisfaction. The mediator variable for the analysis was the intensity of social networking site use. The indirect effect of relationship satisfaction on online infidelity was not found to be statistically significant [Effect = -.0100, 95% CI (-.0717, .0186), $p > .05$].

Analysis of those admitting attempting to engage in online infidelity used the following model:

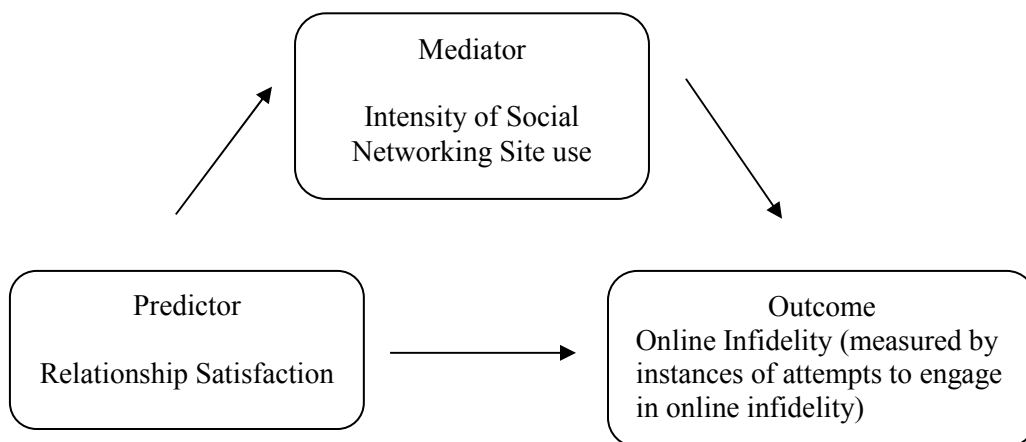


Figure 6. This figure illustrates the mediating effect analyzed.

I performed a simple mediation analysis using PROCESS. The outcome variable for the analysis was the number of times attempting to engage in online infidelity via social networking site use. The predictor variable was relationship satisfaction. The mediator variable for the analysis was the intensity of social networking site use. The indirect effect of relationship satisfaction on the frequency of attempting online infidelity was not found to be statistically significant [Effect = -.0134, 95% CI (-.0806, .0238), $p > .05$].

Summary

I provided an initial overview of data collection procedures, demographic characteristics of the 136 participants, and reliability of instrumental measurements in Chapter 4. I provided descriptive statistics for the instrumental measurements used in the analysis of the four dependent variables: relationship satisfaction, impulsivity, permissive sexual values, and the intensity of social networking site use and descriptive statistics for each item is provided in Appendix C due to lengthy content. With this research study, I intended to investigate the relationship of the abovementioned dependent variables and the frequency of engagement in online infidelity via social networking site use.

I first sought to identify if there were differences between groups admitting an attempt to engage and those admitting engagement in online infidelity via social networking site use. With one significant difference found, the two groups were to remain separate independent variables and to be analyzed independently.

With the first research question, I sought to identify if relationship satisfaction was the strongest predictor of the frequency of engaging in online infidelity via social networking site use when impulsivity, permissive sexual values, and the intensity of social networking site use were competing variables. With those who have engaged, relationship satisfaction was the strongest predictor; intensity of social networking site use added to the prediction as well. For those who admitted attempting to engage in online infidelity via social networking site use, relationship satisfaction was not the strongest predictor.

I then wanted to evaluate differences between groups admitting attempting to engage in online infidelity, engaging in online infidelity, and denying online infidelity via social networking site use and found differences in relationship satisfaction and permissive sexual values. With the third research question, I analyzed impulsivity's impact on the relationship between relationship satisfaction and the frequency of attempting or engaging in online infidelity via social networking site use, and found impulsivity was not a moderator. With the fourth research question, I sought to identify whether one's intensity of social networking site use had any effect on the relationship between permissive sexual values and the frequency of attempting or engaging in online infidelity via social networking site use and it was found that the intensity of social networking site use was not a moderator for those engaging in online infidelity but a negative moderation effect was found for those attempting to engage in online infidelity via social networking site use. My final focus of the research study was identifying if ones' intensity of social networking site use influences relationship satisfaction which in

turn, would increase the frequency of online infidelity via social networking site use. No mediation was found in this relationship.

The insights gained by this research study will contribute to the lack of quantitative data in existence regarding online infidelity and social networking site use. Additionally, this research provides insight into variables of an individual that may potentially predict the frequency of an individuals' engagement in online infidelity. This information can potentially be utilized by individuals, professional counselors, and improve therapeutic procedures. Chapter 5 will provide an interpretation of the data and conclusions. Additionally, suggestions for further research are discussed.

Chapter 5: Conclusion

Introduction

The purpose of this study was to examine the predictability of the frequency of engaging in online infidelity via social networking site use based on four dependent variables: relationship satisfaction, impulsivity, permissive sexual values, and intensity of social networking site use. The sample population included online users 21 years of age and older, residing in the United States of America and U.S. Virgin Islands. I collected data using an online-based survey and analyzed through quantitative analysis. Based on responses from these surveys, I separated respondents into three groups for final analysis. In this chapter, I first present research findings. Next, I discuss limitations related to the research process along with recommendations for future research. Following this, I present the potential impact of this research. I then close the chapter with concluding thoughts about the research study and online infidelity via social networking site use.

Interpretation of Findings

This section contains the discussion regarding the findings from this study. I first discuss items related to the separation of the independent variables. Results from regression analyses are presented, followed by, the ANOVA analysis between the three groups. I then examine the four moderation analyses, with the two mediation analyses to follow.

Independent Variables

Separation of Variables. For the sample population, those denying attempting and/or engaging in online infidelity held the majority of respondents. In theory, those that

attempted and those that engaged in online infidelity may possess similar characteristics in respect to relationship satisfaction, impulsivity, permissive sexual values, and intensity of social networking site use. The purpose for not following through is not identifiable, but it could be due to lack of reception to their advances or they reneged on their intentions for some unknown reason. Thus, I planned to combine these two groups with the assumption they would be similar.

Upon completion of four independent samples *t*-tests, respondents admitting engagement in online infidelity expresses significantly higher levels of permissive sexual values when compared to those respondents attempting to engage in online infidelity via social networking site use. With having a significant difference between groups, it was required I conduct analyses on each group individually.

When looking at the demographic data, the majority of respondents were female which is not only true of those admitting engagement in online infidelity, but of all groups. These results suggest women are more apt to take the time to complete surveys online and previous research has shown women are more likely than men to participate in surveys (Curtin, Presser, & Singer, 2005; Moore & Tarnai, 2002). These values do not indicate women as the primary sex engaging in or attempting to engage in online infidelity. However, previous research has shown that women are more likely to use cyberspace for communication and sharing of information; whereas, men are more apt to utilize cyberspace for information seeking purposes (Jackson et al., 2001). Survey completion is an exchange of information type of behavior. Furthermore, the act of online infidelity is based on behaviors of communication and exchange of information. It could

be possible women are more likely to engage in online infidelity. More research, with equal gender representation, would be required to investigate this.

Correlations of Engaging in Online Infidelity. I have presented some correlations in this section that were not expected. As relationship satisfaction increases, there is a growth in engagement in online infidelity, which is in line with the results of the subsequent analysis. Speculation then arises that relationship satisfaction, rather than dissatisfaction, could be a predictor for online infidelity. Upon further review of data, I found that as permissive values increase there are more occurrences of online infidelity. However, with these two variables showing association with an increase in instances of online infidelity, it was important to identify any relationship between relationship satisfaction and permissive sexual values.

I found that higher permissive sexual values were associated with greater relationship satisfaction. One explanation would be possible changes in relationship dynamics. Relationships that are more permissive are “open” relationships, where a partner has more perceived freedom to develop secondary relationships, have increased primary relationship satisfaction. I would speculate, this “freedom” would allow for more engagement in infidelity, both, online and offline.

The alternative rationale for this would be that the individual engaging in online infidelity has higher permissive sexual values, is more permissive in their sexual behaviors, and uses the discreet online platform to satisfy sexual gratification without their primary partner being aware. By obtaining this gratification online, they feel more satisfied in their primary offline relationship. If this is the case, it is contrary to previous

findings where infidelity increased marital dissatisfaction (Previti & Amato, 2004; Thompson, 1984).

Another aspect to examine in future research would be the item measurement. The instrument utilized for relationship satisfaction does not present any questions directed at sexual satisfaction in the relationship. It could be argued that “meeting needs” qualifies for sexual needs as well but it is not worded as such. Furthermore, the instruments used for permissive sexual values have no questions directed toward current sexual behavior or satisfaction/deficit of current sexual needs being met and could indicate a person identifies heightened satisfaction within their relationship as an overall lack of conflict and emotional support. Whereas, they may not be satisfied sexually, which caused them to seek this sexual gratification on a discreet online platform. With the uncertainty of these somewhat perplexing findings, further research for clarification is needed in this area.

Predicting the Frequency of Engagement in Online Infidelity. Relationship satisfaction was shown to be the best predictor for the frequency of online infidelity via social networking site use; therefore, I rejected the null hypothesis. As indicated in the significant correlations previously discussed, relationship satisfaction was not in the direction I predicted. These findings then do not support previous research where low relationship satisfaction is widely recognized as the primary motivation for infidelity (Atkins, Baucom, & Jacobson, 2001; Buss & Shackelford, 1997; Prins, Buunk, & VanYpren, 1993; Treas & Giesen, 2000; Whisman, Gordon, & Chatav, 2007). Yet, it does correspond with some clinicians that have declared infidelity does not automatically

imply a deficit in the primary relationship (Elbaum, 1981; Finzi, 1989). This study does not provide evidence for this idea and indicates a need for further research. There is no current research focusing on relationship satisfaction and online infidelity until the research presented herein. Many research studies have indicated a need for such research by recognizing that the online environment provides a greater opportunity (Treas & Giesen, 2000) for those seeking attention and acceptance from others when their marriage/relationship is in an unsatisfactory place (Whisman et al., 2007; Wysocki & Childers, 2011).

The intensity of social networking site use also added to the prediction of the frequency of engaging in online infidelity via social networking site use. I conceptualized this variable as time being spent away from the primary relationship. Previous research has suggested establishing separate lives and taking attention away from the primary relationship can prove to be damaging to the relationship (Blumstein & Schwartz, 1983; Hertlein & Piercy, 2006). In fact, online activity has been researched in respect to online infidelity, producing findings that 42% of compulsive Internet users were engaging in online infidelity (Greenfield, 1999). The results herein allow for speculation that social networking site use is an opportunity for time spent away from one's primary relationship. Also from these results, there is speculation that the intensity of social networking site use could have an impact on relationship satisfaction or vice versa. However, it is unclear which variable is a precursor for the other.

Correlations of Attempting to Engage in Online Infidelity. These theories are strengthened by results of the correlation analysis executed on this group. In individuals

attempting to engage in online infidelity via social networking site use, as self-reported impulsivity increases, there is a direct relationship with increased intensity of social networking site use. This relationship was the only one found between variables among this group.

Table 9 showed the numbers of attempts to engage in online infidelity are significantly correlated with impulsivity; whereas, the number of engagements in online infidelity are significantly correlated with the intensity of social networking site use, permissive sexual values, and relationship satisfaction. Impulsivity was not a factor involved with those engaging in online infidelity. This further indicates how different these two groups are. It may benefit future research to gain more insight into this group individually and work to identify the predictors of impulsivity as they may relate to impulsivity issues, time spent on social networking sites, permissive sexual values, self-esteem, or other factors entirely.

Predicting the Frequency of Attempts to Engage in Online Infidelity. With those attempting to engage in online infidelity, the results were not as expected. The only significant predicting variable for the frequency of attempting to engage in online infidelity via social networking site use was impulsivity, which would essentially retain the null hypothesis. However, this is a socially significant finding as it clearly shows those attempting to engage in online infidelity and those that engage in online infidelity are two entirely different groups of people. This is a finding that I did not predict. I originally intended to combine the groups as they would seemingly possess similar characteristics about relationship satisfaction, impulsivity, permissive sexual values, and

intensity of social networking site use. In fact, in the preliminary analysis, impulsivity was the lowest predictor for those engaging in online infidelity. Another interesting result of this analysis was relationship satisfaction being the lowest predicting variable. These two results are in opposition between those engaging in online infidelity and those attempting to engage in online infidelity via social networking site use.

There are possibly different motivational factors impacting this group altogether. There may be moments in the relationship where an argument does not affect overall relationship satisfaction, but during this time of emotional strain in their relationship, a person may seek attention, approval, or affection from someone online. This occurrence is a momentary need until their emotions regulate and the tension in the primary offline relationship dissipates. Another factor could be a moment of perceived emotional and/or sexual boredom in their primary relationship. A change from their regular routine may present online and provoke spontaneity and intrigue; however, they may realize the potential damage to their primary relationship and renege.

Differences Between Groups

My initial intent with this research study was to identify if any differences in relationship satisfaction, impulsivity, permissive sexual values, and the intensity of social networking site use existed between only two groups. However, after the previous analyses, it changed the direction and required analysis of differences between three groups: attempting to engage in online infidelity, engaging in online infidelity, and not attempting and/or engaging in online infidelity via social networking site use. Prior research has not examined differences between those attempting to engage in infidelity

and those engaging in infidelity. I found that those attempting engagement in online infidelity presented significantly lower relationship satisfaction when compared to those that have not attempted and/or engaged in online infidelity, which is interesting considering relationship satisfaction did not show up as a significant predictor for attempting to engage in online infidelity from the previous analysis. It was also surprising to find there that there was no significant difference between those engaging in online infidelity via social networking site use and the other two groups.

In further evaluation of results, I identified a difference between permissive sexual values. Permissive sexual values were found to be significantly higher for participants that have engaged in online infidelity via social networking site use when compared to those that have attempted to engage in online infidelity and those denying attempting or engaging in online infidelity via social networking site use, which is a finding one would expect to see. However, there could be an assumption one would still find a difference in permissive sexual values between those attempting engagement and those denying attempting and/or engaging in online infidelity via social networking site use. However, it was not statistically significant. In fact, the values showed a stronger difference between those engaging and those attempting to engage in online infidelity than between those engaging in online infidelity and those that have not attempted and/or engaged in online infidelity via social networking site use. The values show those attempting to engage are the least permissive out of the three groups. This draws more speculation about what motivators are within this group that has not been identified in this research.

Impulsivity did not show any significant differences. Previous analysis demonstrated impulsivity as the strongest predictor of attempting to engage in online infidelity. Thus, there was an expectation of identifying differences on this variable between groups. In fact, none of the values were close to significance.

Moderation Analysis for those Attempting and Engaging

Moderation effect of Impulsivity. Impulsivity did not moderate the relationship between relationship satisfaction and the frequency of attempting to engage in online infidelity, which would cause one to retain the null hypothesis. A correlation was present between impulsivity and the frequency of attempts to engage, yet, there was no correlation between impulsivity and relationship satisfaction. The latter correlation is not a requirement of moderation analysis, however, when looking at previous analyses executed within this group relationship satisfaction does not appear to have any association with online infidelity via social networking site use within this group. Thus, this is not a surprising find.

Impulsivity did not moderate the relationship between relationship satisfaction and the frequency of engaging in online infidelity via social networking site use, which would allow for this research to retain the null hypothesis. There were no correlations found between any variables within this group, which violates requirements of running any further moderation analysis.

The rationale for examining a moderating effect of impulsivity was based on previous research. Impulsivity is the failure to refrain from acting on, seemingly, automatic impulses (Miyake, Friedman, Emerson, & Witzki, 2000). This lack of impulse

control has been related to problematic Internet use, where infidelity was loosely lumped into this construct (Davis, 2001). It was suggested that higher levels of impulsivity may, during times of relationship strain, lower ones' inhibitions. This would then promote problematic Internet use, or in this case, intensification of social networking site use. By being present on social networking sites, a person would receive instant gratification. This instant gratification is something that perpetuates impulsive behavior. However, this study shows no evidence to validate Davis' (2001) theory.

Moderation effect of Social Networking Site Use. In those admitting attempts to engage in online infidelity, the intensity of social networking site use moderated the relationship between permissive sexual values and the frequency of attempts to engage in online infidelity via social networking sites. However, for this analysis, running the moderation analysis was not necessary. There were no correlations between variables within this group, which is a prerequisite for execution of moderation analysis. Therefore, analysis of this result will not be interpreted any further.

Among those having engaged in online infidelity, there were correlations found between the frequency of engaging in online infidelity and, both, the intensity of social networking site use and permissive sexual values. It was theorized that a person possessing more permissive sexual values could potentially begin to waiver in their loyalty if they spent more time in an environment where emotional and/or sexual opportunities presented. Sexual permissiveness is characterized by ideation of sexual freedom and a leniency in sexual behaviors, and the social networking site platform allows for expression of this in a discreet manner. However, the intensity of social

networking site use was not found to moderate the relationship between permissive sexual values and the frequency of engaging in online infidelity via social networking site use.

The basis of identifying a moderating effect of social networking site use on permissive sexual values was founded on Cooper's (1998) 'Triple A' theory. This theory focused on the accessibility, affordability, and anonymity of online infidelity (Cooper, 1998). These three variables are all characteristics of permissiveness with each involving the evaluation of opportunities. Someone that is highly permissive is more likely to recognize potential opportunities where emotional and/or sexual alternative relationships can develop (Johnson, 1970; Maykovich, 1976). The use of social networking sites provides great opportunity with all the aspects detailed by Cooper (1998). However, the present study did not find a connection between permissiveness and the intensity of social networking site use in relationship to engaging in online infidelity.

Mediation Analysis for those Attempting and Engaging

The intensity of social networking site use does not mediate the effect of relationship satisfaction on the frequency of attempts to engage in online infidelity. For mediation analysis to be executed, the intensity of social networking site use is required to correlate with, both, relationship satisfaction and frequency of attempts to engage in online infidelity. This requirement was not satisfied. Thus, there is no need for speculation of results.

For those that have engaged in online infidelity, there were correlations between the instances of infidelity and, both, the intensity of social networking site use and

relationship satisfaction. However, there was no correlation between the intensity of social networking site use and relationship satisfaction. The lack of these correlations does not allow for any further mediation analysis to be executed. However, this mediation analysis can provide insight into the results from Research Question 1 where relationship satisfaction and the intensity of social networking site use were found to be predictors of the frequency of online infidelity. This mediation analysis shows intensity of social networking site use is not indicated as the “how” or “why” behind the relationship between relationship satisfaction and the frequency of engaging in online infidelity via social networking site use. Simply stated, having a heightened presence on social networking sites does not seem to be related to the satisfaction of ones’ relationship and the act of engaging in online infidelity.

Based on previous research, there was a mediation effect expected to be found. There has been research surrounding the effects of taking time away from ones’ primary relationship (Hertlein & Piercy, 2006; Widyanto & Griffiths, 2006) and establishing a life outside of the primary relationship (Blumstein & Schwartz, 1983). There has been research specific to the online environment providing an “escape” from a dissatisfactory and/or unfulfilling relationship (Hertlein & Stevenson, 2010). Also, attention, physically and emotionally, is taken away from the primary relationship (Hertlein & Piercy, 2006) which one would speculate this withdrawal from the primary relationship could cause a decrease in relationship satisfaction. Despite previous research indicating a relationship between these variables, this study does not provide evidence one exists.

Strengths and Limitations of the Study

The purpose of any research is to advance understanding of a specified topic. Along with this, it is a responsibility of the researcher to provide a summation of strengths and limitations found in the research study. Providing information about strengths and limitations will assist future research designs in the same area. The following section presents strengths and limitations that relate to the data collection procedure and analyses.

Strengths

A primary concern for the topic of online infidelity in general is previous research is dated and collected primarily from a population of college students. The present study allows for insight into a larger population, age and generation wise. Additionally, it allows for more relevant insight to coincide with trends showing increases in infidelity due to social networking site use (Lumpkin, 2012) where limited information is available.

Previous research has been primarily grounded on peoples' perspectives of what behaviors constitute online infidelity and perceptions of what qualifies as unfaithful online behavior. No known emphasis has been placed on variables that precipitate engaging in online infidelity via social networking site use. Additionally, no studies have been conducted to include the independent variables examined (i.e., have attempted to engage, have engaged, and have not engaged in online infidelity via social networking site use). Similar to the point made about the independent variables for this study, the dependent variables included in this study that provides additional contributions to the literature about online infidelity (i.e., relationship satisfaction impulsivity, permissive sexual values, and the intensity of social networking site use). These variables, with the

exception of intensity of social networking site use, have never been evaluated within the scope of online behavior.

The intensity of social networking site use has been a variable created and modified scale used specifically for this research as the role of social networking site use on online infidelity has not been researched. There has been speculation that Internet use is a host for potentially addictive and problematic online behavior, such as auctions, stock trading, gambling, infidelity, and other sexual materials/services (Davis, 2001; Young, 1998). Some research has focused on the effects of online use and users' self-esteem, social support, and satisfaction of life (Bargh & McKenna, 2004; Shaw & Gant, 2002; Valkenburg et al., 2006). The current literature surrounding the frequency of Facebook use, which is only within college-aged participants, assessed psychological effects of intensified Facebook use on respondents (Ellison et al., 2007; Steinfeld, Ellison, & Lampe, 2008). However, this study directly measures the intensity of ones' social networking site use about engaging in online infidelity, as well as, in conjunction with relationship satisfaction, impulsivity, and permissive sexual values across various age groups.

Limitations

Several limitations potentially impacted the results of this study. First, the study sample was relatively small in relation to the population of interest. As of November 2015, there were 213,075,500 people with active accounts on Facebook in the North American region (Internet World Stats, 2016). Only having 136 respondents limits the overall generalizability of the results. The survey was promoted on Facebook, MySpace,

LinkedIn, and findparticipants.com and presented in an online format, which was considered the ideal method for data collection considering the content of the research focusing on online infidelity and social networking site use. However, it could be some people that have engaged in online infidelity have removed themselves from social networking sites to minimize further risk of engaging in infidelity again.

There is inequality of representation within the sample population. The majority of the sample population, 46%, denied attempting and/or engaging in online infidelity. Female respondents took up approximately 76% of survey responses. Additionally, the age ranges were vast, focusing on 21 years old and above. The research had no way of accounting for generational differences in the variables of interest, mainly, permissive sexual values, the intensity of social networking site use, and impulsivity. Future research should aim to obtain equal representation from males and females, and groups that are attempting, engaging, and denying online infidelity. Focusing on one specific age group or generation at a time may also provide more precise information.

Another limitation would be the lack of incentives for survey participation. There would be minimal motivation for an individual to take a survey of this size without any perceived benefit. I did find the most brief surveys available for measuring the variables of interest.

One final substantial limitation lies in respondents' comprehension of the survey. Some may not fully view some of their behaviors as infidelity or respondents may underestimate their expression of some behaviors. Online infidelity via social networking site use is a topic that is not widely researched and may not be fully understood by some.

Recommendations

Although previous online research has yielded high response rates, it seems the participant numbers were relatively low. It is unclear what deterred respondents or provided low participation. The data collection period was only for approximately four months; the final month promotion of the study was increased to weekly promoting which would influence more people to come in contact with the available survey. The duration of data collection may need to be extended along with heavier promoting throughout the entire duration. The lack of participation may be the method of obtaining respondents through social networking sites was a poor choice. Replication of the study may warrant a further reach for respondents not only through online avenues.

Another suggestion for future research would be the demographic reach. As found herein, there was a misrepresentation of male participants. Also, there may be interest in focusing on ages 30 years of age and older as the majority of respondents were found in this age range. An additional variable to address may be socioeconomic status or education level. Previous research has shown those of higher, both, socioeconomic status and education attainment are more likely to engage in infidelity, as well as, participate in surveys (Allen et al., 2005; Atkins, et al., 2001; Curtin et al., 2000; Treas & Giesen, 2000; Goyder, Warriner, & Miller, 2002). Thus, these variables may be of interest for future research.

Previously discussed, there is an area of inconsistency with online infidelity where behaviors of relationship misconduct are unclear. As Whitty (2005) suggested, online infidelity has three components: sexual infidelity, emotional infidelity, and the use

of pornography (viewing of sexually explicit images and/or videos). If one partner in the relationship recognizes the behavior as a violation of their romantic relationship, a significant trauma has occurred (Argyle & Shields, 1996; Whitty, 2003). The area where this research study fell short was the lack of identification of what participants that attempted to engage or engaged in online infidelity through social networking site use recognize as infidelity. Thus, future research may wish to clearly identify what the respondents are viewing as online infidelity.

Implications

This research study provides foundational information in several areas where there is limited to no research available. With the results of the analyses herein, more attention may be drawn to the area of online infidelity specific to social networking sites. As there has been minimal research on this topic, this research study provides some foundational education and insight for the public, as well as, the professional community. This education to the public at large may influence higher participant numbers for future research in this area as it does seem, based on this research, there are areas where further research is warranted. There may be modifications needed to reduce the length of the survey. Also, it would benefit to question further that attempting engagement in online infidelity via social networking site use. For example, one may wonder why the individual did not end up following through with their attempts to engage in online infidelity. Additionally, identification of demographic differences between items such as socioeconomic status, educational, cultural, and/or religious, could develop future research in this area exponentially.

Previous research in online infidelity has no known emphasis on either social networking site use or the theoretical perspective of cognitive behavior theory. Thus, the results obtained from the analyses herein cannot be generalized easily. Although all criteria were met for the validity of the study, the results are quite preliminary. However, the evidence suggests engaging in online infidelity via social networking site use is directly related to ones' relationship satisfaction. which parallels previous research identifying relationship satisfaction as the primary contributor of engaging in offline infidelity (Atkins, Baucom, & Jacobson, 2001; Previti & Amato, 2004; Treas & Giesen, 2000; Whisman, Gordon, & Chatav, 2007). However, previous studies have identified relationship dissatisfaction where this study identifies relationship satisfaction as the primary contributor for engaging in online infidelity. Which some clinicians have discussed relationship satisfaction has no contribution to infidelity (Elbaum, 1981; Finzi, 1989). This is a factor that warrants further research.

The findings are inconclusive in relation to cognitive behavioral theory (Davis, 2001). It is hard to identify from the research why an individual admitting higher relationship satisfaction would engage in online infidelity via social networking site use, also, why a relationship between permissive sexual values and relationship satisfaction exists amongst this group. The cycle cognitive behavioral theory outlines: feelings influencing behavior, behavior influencing thoughts, thoughts influencing feelings, feelings influencing behavior, with continuation of the cycle does not seem to make sense with this research. Especially when social networking site use is a secondary predictor or engaging in online infidelity but is not identified as moderator for relationship

satisfaction and online infidelity. However, there seems to be some significance between relationship satisfaction, permissive sexual values, and the intensity of social networking site use that this research did not readily identify but future research may be able to.

In regards to those that have attempted to engage in online infidelity, this is a group for which no known previous research has been identified. Thus, a generalization of research is not offered. Nevertheless, evidence suggests this population varies exponentially from those that have engaged in online infidelity via social networking site use. Impulsivity is implicated as the strongest predicting variable for attempting to engage in online infidelity via social networking site use.

This study, as alluded to, does have areas that warrant further research; yet, with new insights provided with this research study, individuals can become better educated in an area where they may be susceptible to engaging in unfaithful behavior or be able to identify their partners' behaviors and work together to prevent engagement in potentially damaging behaviors. With the numbers increasing, in relation to online infidelity, and the identified association with social networking site use, some approach towards rehabilitation and/or cognitive behavioral guidance can potentially be obtained. This research could possibly allow for better therapeutic practices directed towards individuals, as well as, couples.

Conclusion

There has been an increasing trend of social networking site use, which has been met with an increase in opportunity for establishing and maintaining romantic relationships online. Online interaction is readily available, relatively simplistic,

prominent in society, and covert in nature, which has caused instances of online infidelity to become a growing concern as well. The establishment of online romantic relationships, emotional and/or sexual, can have a significant effect on offline romantic relationships. Thus, the present study set out to clearly identify the predictability of the frequency of engaging in online infidelity via social networking site use based on four variables.

The initial investigation into these four variables found results that aligned with previous research suggesting relationship satisfaction as being the causation for infidelity, yet, it was not in the direction previously identified. (Elbaum, 1981; Finzi, 1989). This research did present additional findings which suggest that social networking site activity is a secondary predictor to relationship satisfaction. Another significant find amongst those engaging in online infidelity via social networking site use was the positive correlation found between permissive sexual values and relationship satisfaction. One of the most pivotal findings of this research study is the identification of those attempting to engage in online infidelity expressing very different variables as predictors when compared to those that have engaged. Other relationship trends identified in variables between groups make sense in relation to what one would expect to see.

Suffice it to say, at this point, multiple variables seem to contribute to the frequency of attempts to engage and the frequency of engagement in online infidelity, and differences between those attempting to engage and those that do engage in online infidelity via social networking site use. This study makes contributions to the knowledge about online infidelity via social networking site use. It has only begun to scratch the surface of other information to be obtained. This work presents insights into the

predictability of online infidelity, while also offering some valuable tools, both of which will hopefully motivate future research.

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Appendix A: Instrumental Invitation

A1. Instrumental Invitation

“Voluntary adult respondents are needed for psychological research pertaining to social networking site use and the development of social networking site relationships.

Participation involves a brief multiple choice survey. There will be no self-identifying information disclosed to ensure confidentiality and anonymity.”

Appendix B: Instrumental Measures

B1. Demographics

Item	A	B	C	D	E
1. Gender	Male	Female	Decline		
2. Age	21-24	25-29	30-39	40-49	>50
3. Sexual Orientation	Heterosexual	Homosexual	Bisexual	Decline to Respond	-----
4. Relationship Status	Single	Partnered	Married	Divorced	Widowed
5. Country/Region of Residence	United States/US Territories	Other			

B2. Social Networking Site Behavior

Item	A	B	C	D	E
1. How many times have you engaged in a romantic emotional and/or sexual relationship with someone on a social networking site while you were in a committed romantic offline relationship (cohabitating or married)?	0	1	2	3	4+
*2. Which of the following social networking sites have you used to meet the online partner(s)?	MySpace	Facebook	LinkedIn	Twitter	Other
3. How many times have you attempted to engage in a romantic emotional	0	1	2	3	4

and/or sexual relationship with someone on a social networking site while you were in a committed romantic offline relationship (cohabitating or married)?	Never	Rarely (Once a year)	Average (Three times a year)	Frequently (Six times a year)	Always (More than six)
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*Item will allow for multiple answers

B3. Relationship Satisfaction

Relationship Assessment Scale (RAS)

The following seven questions concern the satisfaction of your offline relationship. When completing these questions, if you have engaged in online infidelity, please answer the questions as your satisfaction with the offline relationship at the time of your experience with online infidelity.

Item	Low				High
1. How well does your partner meet your needs?	1	2	3	4	5
2. In general, how satisfied are you with your relationship?	1	2	3	4	5
3. How good is your relationship compared to most?	1	2	3	4	5
*4. How often do you wish you hadn't gotten into this relationship?	1	2	3	4	5
5. To what extent has your relationship met your original expectations?	1	2	3	4	5
6. How much do you love your partner?	1	2	3	4	5
*7. How many problems are there in your relationships?	1	2	3	4	5

*Items are reverse-scored

B4. Intensity of Social Networking Site Use*Problematic Internet Use Questionnaire Short Form (PIUQ-SF)*

Item	Never				Always
1. How often do you feel tense, irritated, or stressed if you cannot use a social networking site for as long as you want to?	1	2	3	4	5
2. How often do you feel tense, irritated, or stressed if you cannot use a social networking site for several days?	1	2	3	4	5
3. How often does it happen to you that you feel depressed, moody, or nervous when you are not on a social networking site and these feelings stop once you are back online?	1	2	3	4	5
4. How often do you neglect household chores to spend more time on social networking sites?	1	2	3	4	5
5. How often do you spend time on social networking sites when you'd rather sleep?	1	2	3	4	5
6. How often do people in your life complain about you spending too much time on social networking sites?	1	2	3	4	5
7. How often do you feel that you should decrease the amount of time on social networking sites?	1	2	3	4	5
8. How often does it happen to you that you wish to decrease the amount of time spent on social networking sites but you do not succeed?	1	2	3	4	5
9. How often do you try to conceal the amount of time spent on social networking sites?	1	2	3	4	5

B5. Impulsivity*Barratt Impulsivity Scale 15 (BIS-15)*

Item	Rarely/Never			Almost Always
*1. I act on impulse.	1	2	3	4
2. I act on the spur of the moment.	1	2	3	4
3. I do things without thinking.	1	2	3	4
4. I say things without thinking.	1	2	3	4
5. I buy things on impulse.	1	2	3	4
*6. I plan for job security.	1	2	3	4
*7. I plan for the future.	1	2	3	4
*8. I save regularly.	1	2	3	4
*9. I plan tasks carefully.	1	2	3	4
*10. I am a careful thinker.	1	2	3	4
11. I am restless at lectures or talks.	1	2	3	4
12. I squirm at plays or lectures.	1	2	3	4
*13. I concentrate easily.	1	2	3	4
14. I don't pay attention.	1	2	3	4
15. Easily bored solving thought problems.	1	2	3	4

*Items are reverse-scored

B6. Permissive Sexual Values

Brief Sexual Attitudes Scale (BSAS) – Permissiveness scale only

Listed below are statements regarding your general attitudes and beliefs about sexual intercourse. First decide whether you agree or disagree with the view expressed; then indicate the level of your agreement or disagreement by selecting the answer that best expresses your view.

Item	Strongly Agree	Moderately Agree	Neutral	Moderately Disagree	Strongly Disagree
1. I do not need to be committed to a person to have sex with him/her.	1	2	3	4	5
2. Casual sex is acceptable.	1	2	3	4	5
3. I would like to have sex with many partners.	1	2	3	4	5
4. One-night stands are sometimes very enjoyable.	1	2	3	4	5
5. It is okay to have ongoing sexual relationships with more than one person at a time.	1	2	3	4	5
6. Sex as a simple exchange of favors is okay if both people agree to it.	1	2	3	4	5
7. The best sex is with no strings attached.	1	2	3	4	5
8. Life would have fewer problems if people could have sex more freely.	1	2	3	4	5

9. It is possible to enjoy sex with a person and not like that person very much.	1	2	3	4	5
10. It is okay for sex to be just good physical release.	1	2	3	4	5

Appendix C: Descriptive Statistics

C1. Descriptive Statistics for Sample Demographics (N=136)

Variable	<i>n</i>	%
Age		
21-24	9	7%
25-29	22	16%
30-39	42	31%
40-49	25	18%
>50	38	28%
Gender		
Male	33	24%
Female	103	76%
Decline	0	0%
Sexual Orientation		
Heterosexual	120	88%
Homosexual	6	4%
Bisexual	7	5%
Decline	3	2%
Relationship Status		
Single	31	23%
Partnered	27	20%
Married	57	42%
Divorced	17	12%
Widowed	4	3%

C2. Descriptive Statistics for Engagement in Online Infidelity (N=136)

Variable	<i>n</i>	%
Have Attempted	36	26%
Have Engaged	38	28%
Have Not Attempted/Engaged	62	46%

C3. Descriptive Statistics for Sample Demographics (*N*=136)

Variable	Attempted Infidelity (n=36)		Engaged in Infidelity (n=38)		Have Not Attempted or Engaged (n=62)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Age						
21-24	1	3%	4	10.5%	4	6%
25-29	9	25%	4	10.5%	9	15%
30-39	9	25%	11	29%	22	35%
40-49	6	17%	10	26%	9	15%
>50	11	30%	9	24%	18	29%
Gender						
Male	6	17%	10	26%	17	27%
Female	30	83%	28	74%	45	73%
Decline	0	0%	0	0%	0	0%
Sexual Orientation						
Heterosexual	34	94%	28	74%	58	93%
Homosexual	0	0%	4	10%	2	3%
Bisexual	0	0%	6	16%	1	2%
Decline	2	6%	0	0%	1	2%
Relationship Status						
Single	13	36%	6	16%	12	19%
Partnered	4	11%	12	32%	11	18%
Married	10	28%	16	42%	31	50%
Divorced	7	19%	4	10%	6	10%
Widowed	2	6%	0	0%	2	3%

C4. Descriptive Statistics for Dependent Variables (*N*=136)

Variable	Attempted Infidelity (n=36)		Engaged in Infidelity (n=38)		Have Not Attempted or Engaged (n=62)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Relationship Satisfaction (RAS)	2.97	0.70	3.11	1.11	3.63	1.22
Impulsivity (BIS)	33.31	6.30	34.13	6.85	32.27	7.27
Permissive Sexual Values (BSAS)	3.89	1.01	2.97	1.28	3.58	1.12
Intensity of Social Networking Site Use (PIUQ)	18.75	9.80	18.37	8.70	15.71	6.96

Note. RAS average score = 1.00 (Low Satisfaction) to 5.00 (High Satisfaction); BIS total score = 9.00 (Low Impulsivity) to 45.00 (High Impulsivity); BSAS average score = 1.00 (High Permissiveness) to 5.00 (Low Permissiveness); PIUQ total score = 9.00 (Low SNS Use) to 45.00 (High SNS Use).

C5. Descriptive Statistics for Relationship Satisfaction (N = 136)

Item	Attempted (n=36)		Engaged (n=38)		Have Not (n=62)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
How well does your partner meet your needs?	3.19	1.33	2.84	1.26	3.39	1.50
In general, how satisfied are you with your relationship?	3.03	1.25	2.84	1.29	3.55	1.55
How good is your relationship compared to most?	3.25	1.34	3.18	1.25	3.63	1.46
*How often do you wish you hadn't gotten into this relationship?	3.22	1.62	3.08	1.55	3.82	1.44
To what extent has your relationship met your original expectations?	3.03	1.42	2.66	1.12	3.45	1.41
How much do you love your partner?	3.64	1.57	3.95	1.06	4.11	1.38
*How many problems are there in your relationships?	2.97	1.50	3.03	1.42	3.42	1.40
Total	2.97	0.70	3.11	1.11	3.63	1.22

C6. Descriptive Statistics for Impulsivity (N=136)

Item	Attempted (n=36)		Engaged (n=38)		Have Not (n=62)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
*I act on impulse.	2.81	0.79	2.58	1.08	3.05	0.80
I act on the spur of the moment.	2.50	0.74	2.39	1.08	2.03	0.92
I do things without thinking.	2.03	0.88	2.18	1.01	1.79	0.85
I say things without thinking.	2.31	1.04	2.18	0.93	1.97	0.96
I buy things on impulse.	2.36	1.05	2.42	1.08	2.21	1.03
*I plan for job security.	1.67	0.86	2.13	0.94	1.94	1.01

(continued)

Item	Attempted (n=36)		Engaged (n=38)		Have Not (n=62)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
*I plan for the future.	1.78	0.96	1.95	0.93	1.79	0.83
*I save regularly.	2.44	1.21	2.39	1.08	2.32	1.05
*I plan tasks carefully.	1.92	0.87	1.92	0.75	2.02	0.88
*I am a careful thinker.	1.92	0.81	2.18	0.90	1.94	0.83
I am restless at lectures or talks.	2.81	0.98	2.58	0.92	2.50	1.14
I squirm at plays or lectures.	2.42	1.03	2.18	1.06	2.26	1.16
*I concentrate easily.	2.42	0.97	2.55	0.76	2.32	0.88
I don't pay attention.	1.92	0.87	2.00	0.87	1.92	0.86
Easily bored solving thought problems.	2.03	0.94	2.47	0.92	2.23	1.05
Total	33.31	6.30	34.13	6.85	32.27	7.27

C7. Descriptive Statistics for Permissive Sexual Values (N=136)

Item	Attempted (n=36)		Engaged (n=38)		Have Not (n=62)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
I do not need to be committed to a person to have sex with him/her.	3.31	1.39	2.50	1.43	3.45	1.46
Casual sex is acceptable.	3.53	1.30	2.50	1.41	3.21	1.38
I would like to have sex with many partners.	4.28	1.14	3.34	1.53	4.00	1.29
One-night stands are sometimes very enjoyable.	3.89	1.26	2.97	1.44	3.56	1.41
It is okay to have ongoing sexual relationships with more than one person at a time.	4.36	0.96	3.11	1.54	3.81	1.40

(continued)

Item	Attempted (<i>n</i> =36)		Engaged (<i>n</i> =38)		Have Not (<i>n</i> =62)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Sex as a simple exchange of favors is okay if both people agree to it.	3.97	1.42	2.84	1.59	3.58	1.50
The best sex is with no strings attached.	4.08	1.27	3.42	1.54	3.98	1.29
Life would have fewer problems if people could have sex more freely.	3.83	1.34	2.95	1.68	3.55	1.40
It is possible to enjoy sex with a person and not like that person very much.	4.00	1.27	2.87	1.34	3.47	1.49
It is okay for sex to be just good physical release.	3.28	1.45	2.45	1.47	2.92	1.39
Total	3.89	1.01	2.97	1.28	3.58	1.12

C8. Descriptive Statistics for Intensity of Social Networking Site Use (*N*=136)

Item	Attempted (<i>n</i> =36)		Engaged (<i>n</i> =38)		Have Not (<i>n</i> =62)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
How often do you feel tense, irritated, or stressed if you cannot use a social networking site for as long as you want to?	1.81	1.28	2.13	1.32	1.55	0.74
How often do you feel tense, irritated, or stressed if you cannot use a social networking site for several days?	2.17	1.36	2.32	1.44	1.85	1.04
How often does it happen to you that you feel depressed, moody, or nervous when you are not on a social networking site and these feelings stop once you are back online?	1.64	1.10	1.74	1.18	1.44	0.76

(continued)

Item	Attempted (<i>n</i> =36)		Engaged (<i>n</i> =38)		Have Not (<i>n</i> =62)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
How often do you neglect household chores to spend more time on social networking sites?	2.39	1.25	2.21	1.19	1.92	1.06
How often do you spend time on social networking sites when you'd rather sleep?	2.39	1.36	2.26	1.29	1.95	1.09
How often do people in your life complain about you spending too much time on social networking sites?	1.89	1.24	1.66	0.85	1.63	0.89
How often do you feel that you should decrease the amount of time on social networking sites?	2.50	1.44	2.29	1.33	2.03	1.19
How often does it happen to you that you wish to decrease the amount of time spent on social networking sites but you do not succeed?	2.22	1.44	2.05	1.16	1.82	1.12
How often do you try to conceal the amount of time spent on social networking sites?	1.75	1.23	1.71	1.18	1.52	0.95
Total	18.75	9.80	18.37	8.70	15.71	6.96

C9. Instrument Reliability

Instrument	<i>N</i> /items	α
Relationship Assessment Scale	7	0.90
Barrett Impulsiveness Scale – 15	15	0.76
Brief Sexual Attitudes Scale	10	0.93
Problematic Social Networking Site Use Scale	9	0.93

Appendix D: Tables of Correlation and ANOVA Analyses

D1. Correlation Analysis of Respondents' Engaging in Online Infidelity (N=38)

Variable	1	2	3	4	5
1. Relationship Satisfaction	-				
2. Impulsivity	0.13	-			
3. Permissive Sexual Values	-0.34*	0.03	-		
4. Intensity of SNS Use	-0.004	-0.02	-0.11	-	
5. Frequency of Infidelity	0.43**	0.15	-0.33*	0.36*	-

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

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

D2. Correlation Analysis of Respondents' Attempting to Engage in Online Infidelity (N=38)

Variable	1	2	3	4	5
1. Relationship Satisfaction	-				
2. Impulsivity	-0.17	-			
3. Permissive Sexual Values	-0.13	-0.23	-		
4. Intensity of SNS Use	-0.01	0.51**	-0.15	-	
5. Frequency of Attempts	-0.05	0.35*	-0.27	0.24	-

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

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

D3. One-Way ANOVA Between Groups (Attempted, Engaged, & Have Not Engaged)

Variable	df	SS	MS	F	<i>p</i>
Source					
Relationship Satisfaction					
Between Groups	2	12.01	6.01	5.22	0.007*
Within Groups	133	153.02	1.15		
Total	135	165.03			
Impulsivity					
Between Groups	2	84.09	42.04	0.88	0.42
Within Groups	133	6346.32	47.72		
Total	135	6430.40			

(continued)

Variable Source	df	SS	MS	F	<i>p</i>
Permissive Sexual Values					
Between Groups	2	16.37	8.18	6.27	0.003*
Within Groups	133	173.63	1.31		
Total	135	189.99			
Intensity of Social Networking Site Use					
Between Groups	2	275.63	137.81	2.01	0.14
Within Groups	133	9114.37	68.53		
Total	135	9389.99			

*Significant variance

D4. Descriptive Statistics of One-Way ANOVAs Between Groups

Variable Source	<i>M</i>	<i>SD</i>
Relationship Satisfaction		
Have Attempted Infidelity	2.97 ^a	0.70
Have Engaged in Infidelity	3.11	1.11
Have not Attempted or Engaged	3.63 ^a	1.22
Impulsivity		
Have Attempted Infidelity	33.31	6.30
Have Engaged in Infidelity	34.13	6.85
Have not Attempted or Engaged	32.27	7.27
Permissive Sexual Values		
Have Attempted Infidelity	3.89 ^c	1.01
Have Engaged in Infidelity	2.97 ^{cd}	1.28
Have not Attempted or Engaged	3.58 ^d	1.12
Intensity of Social Networking Site Use		
Have Attempted Infidelity	18.75	9.80
Have Engaged in Infidelity	18.37	8.70
Have not Attempted or Engaged	15.71	6.96

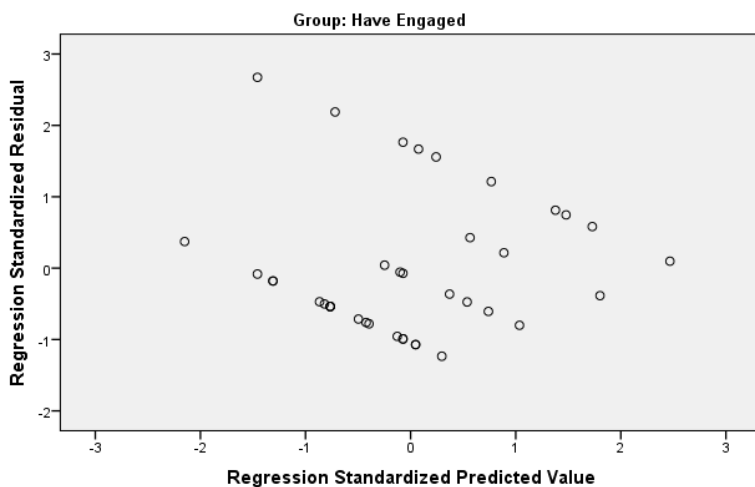
Note. Means sharing a superscript are significant at the 0.05 level.

Appendix E: Scatterplots

E1. Scatterplot of Standardized Residuals for Engaging in Online Infidelity

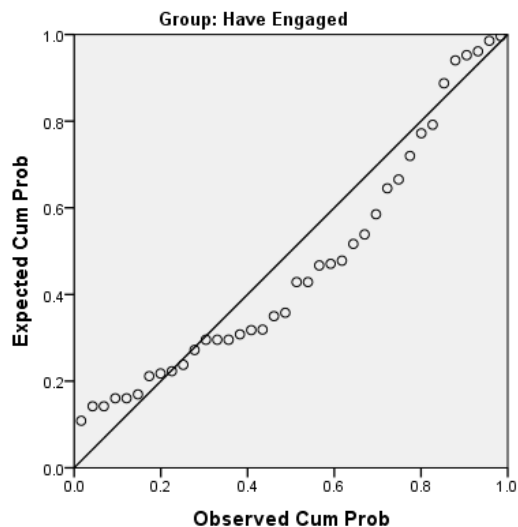
Scatterplot

Dependent Variable: How many times have you engaged in a romantic emotional and/or sexual relationship with someone on a social networking site while you were in a committed romantic offline relationship (cohabitating or married)?

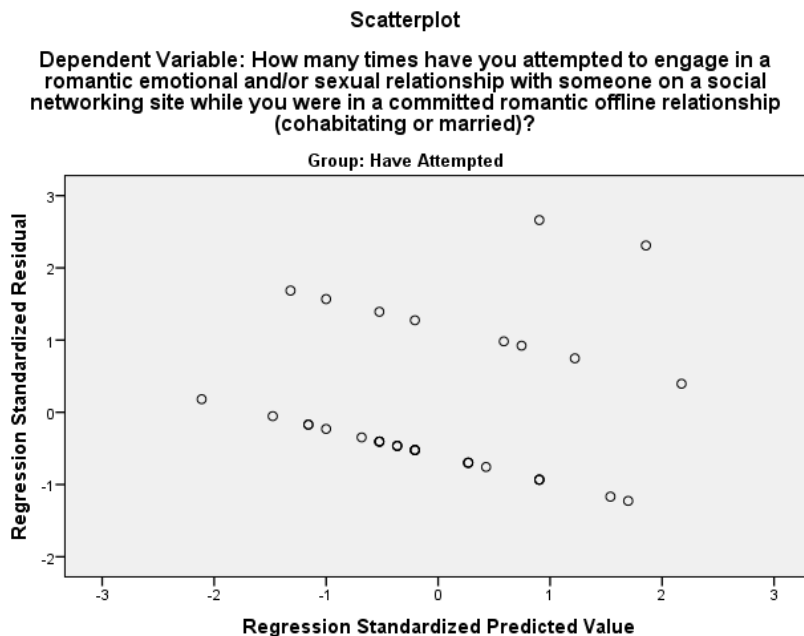
**E2. Normal P-P Plot of Standardized Residuals for Engaging in Online Infidelity**

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: How many times have you engaged in a romantic emotional and/or sexual relationship with someone on a social networking site while you were in a committed romantic offline relationship (cohabitating or married)?



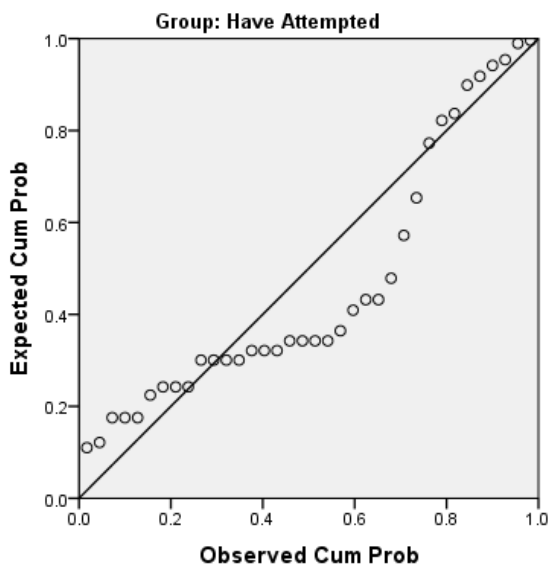
E3. Scatterplot of Standardized Residuals for Attempting to Engage in Online Infidelity



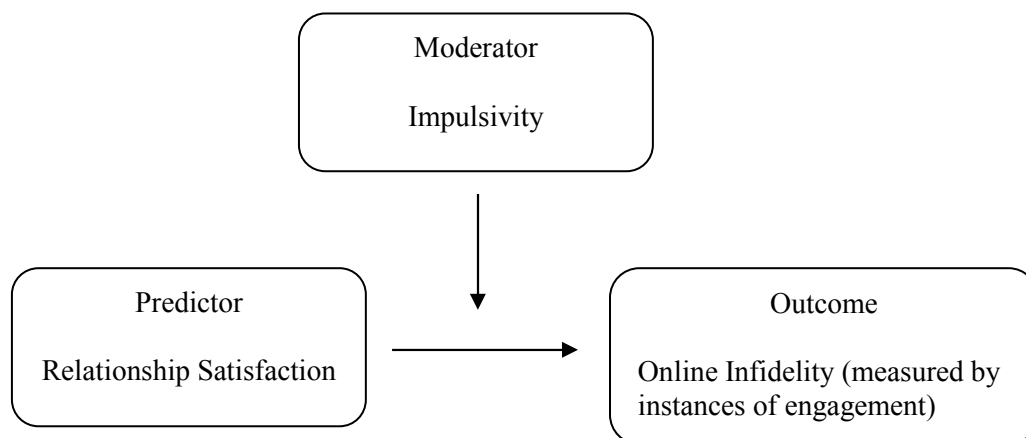
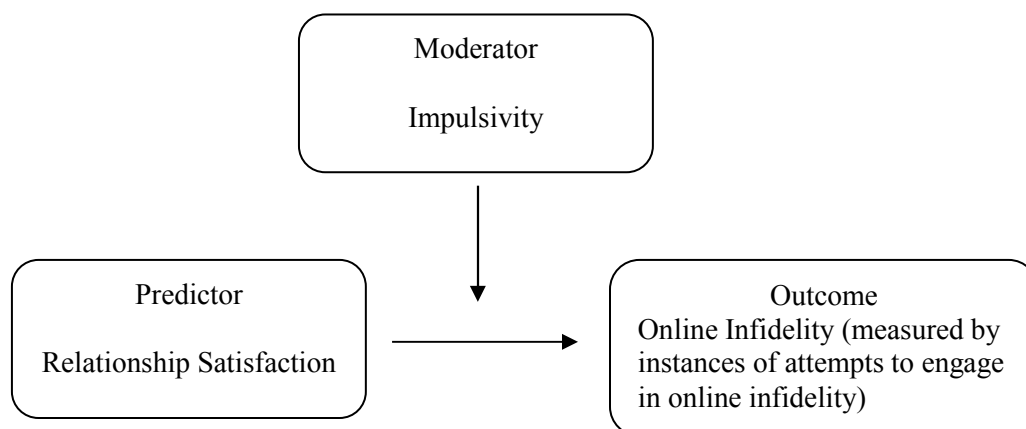
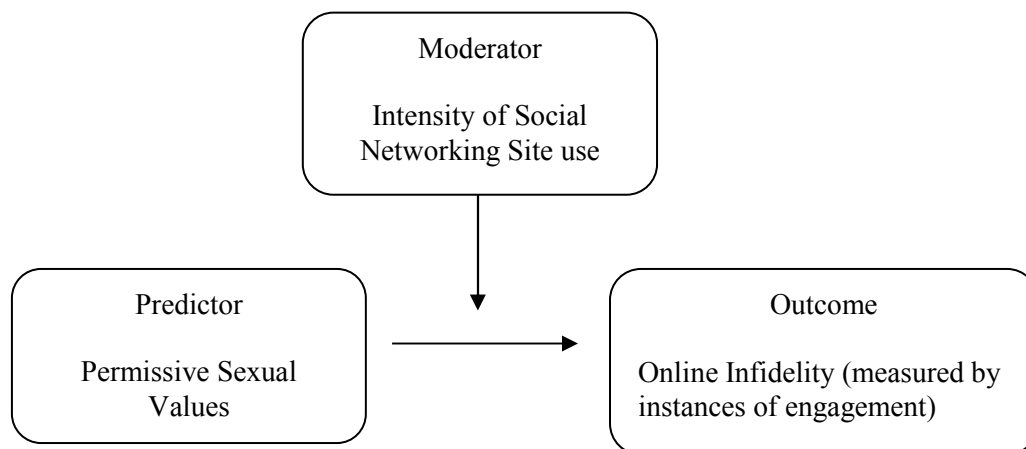
E4. Normal P-P Plot of Standardized Residuals for Attempting to Engage in Online Infidelity

Normal P-P Plot of Regression Standardized Residual

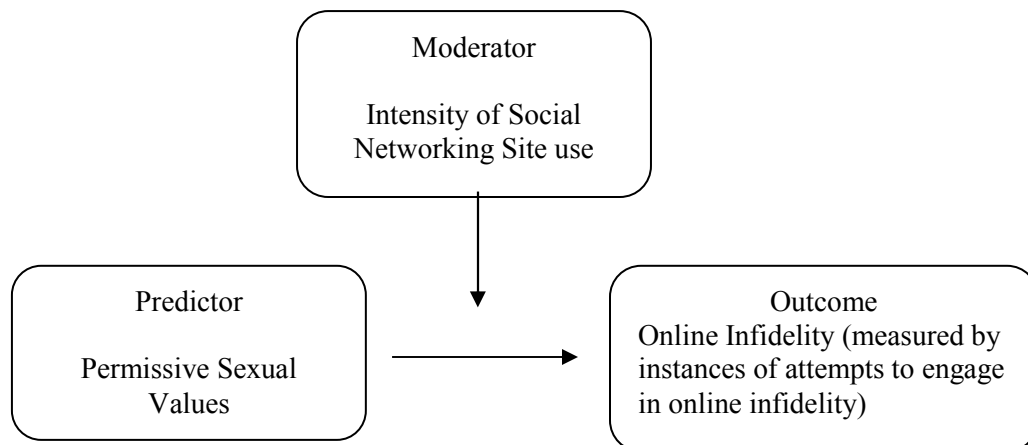
Dependent Variable: How many times have you attempted to engage in a romantic emotional and/or sexual relationship with someone on a social networking site while you were in a committed romantic offline relationship (cohabitating or married)?



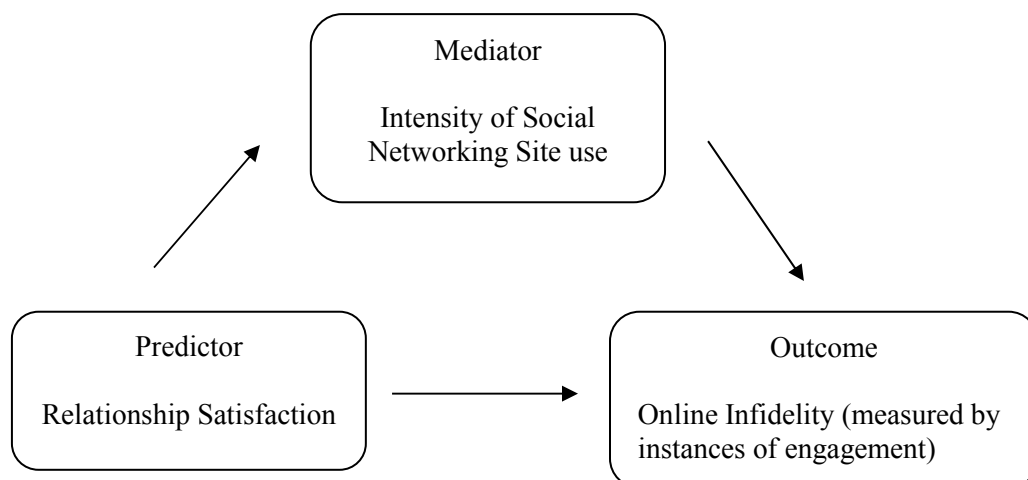
Appendix F: Figures

F1. Analysis of Moderating Effect for Engaging in Online Infidelity.**F2. Analysis for Moderating Effect for Attempting to Engage in Online Infidelity.****F3. Analysis for Moderating Effect for Engaging in Online Infidelity.**

F4. Analysis for Moderating Effect for Attempting to Engage in Online Infidelity.



F5. Analysis for Mediating Effect for Engaging in Online Infidelity.



F6. Analysis for Mediating Effect for Attempting to Engage in Online Infidelity.

