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Walden University

College of Social and Behavioral Sciences

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Rosanna H. Kallay

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the review committee have been made.

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The Office of the Provost

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2019

Abstract

Perceptions of Online Cheating: Impact of Age, Gender, and Sexual Preference

by

Rosanna H. Kallay

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Psychology

Walden University

August 2019

Abstract

The current quantitative study examined perceptions of online infidelity using ANCOVA calculations to determine if significant differences existed between variables of gender, age, orientation. The study considered the applicability of sexual strategy theory (SST) in today's culture and whether it remains relevant in current to today's relationships. SST and previous research suggested a clear trend in differences in perceptions of infidelity based on gender and age, with more mixed results in differences based on sexuality. This study expanded previous research by surveying 148 younger and older demographics, as well as men and women who are in opposite-sex and same-sex relationships. Results indicated no significant differences between emerging adults (21–29 years) and adults (30–45 years), same-sex and heterosexual couples. These findings challenge the applicability of SST to modern day relationships but need to be interpreted carefully due to several limitations of this study including unequal representation of men and same-sex couples. These findings can be considered when addressing online infidelity in individual or couple's counseling. A better understanding of the individual differences in the definition of infidelity has important positive social change implications of showing how online behaviors may affect beliefs on the difficult subject of emotional and sexual infidelity in relationships. Further studies with a larger study group as well as studies on how all media may change cultural values would be useful.

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November 2019

Dedication

For my parents, who gave up everything
and my sister, Anna, who is my much-loved cheerleader.

Acknowledgments

I extend humble gratitude to all the teachers of my life who helped me get to this place. I especially appreciate the kind assistance, the patience, and the encouragement of Dr. Virginia Salzer. Sincere thanks to Dr. Patti Barrows for taking up the hard job of helping at the end. I also want to remember Dr. Brian Zamboni and wish him peace.

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Chapter 1: Introduction to the Study

The rapid increase of instant Internet access has touched every aspect of human behavior and thought, including human sexuality (Chaney & Chang, 2005; Daneback, Månsson, Ross, & Markham, 2012; Hines, 2012; Ucar, Golbasi, & Senturk Erenel, 2016). Today, any person, anywhere in the world, where Internet access is available, can contact another individual for purposes that cover the spectrum of human interaction, from friendship, business, exchange of ideas, or even sexual experiences. At the same time, this unprecedented world-wide reach has challenged long-held beliefs in how business is conducted, how people collaborate, find friendships, find sexual partners, or engage in sexual fantasies (Alterovitz & Mendelsohn, 2011; Sheldon, Abad, & Hinsch, 2015). While business practices in companies can be changed rapidly to meet a new business environment and individuals can embrace new technologies, centuries-old ingrained cultural traditions of mate selection are not easily discarded and can cause varying levels of human confusion and suffering when violated (Hays, 2008). This is even more evident in the most emotion-packed human experiences of marriage or relationship partnering (Delmonico & Griffin, 2012).

I conducted a quantitative study to examine whether individuals who preferred same sex relationships, when compared to their heterosexual counterparts, believed online behaviors could constitute cheating behaviors. Previous research on the perceptions of middle-aged heterosexual adults toward online cheating showed that there is significant confusion as to what online activities or behaviors actually are relationship cheating (Hines, 2012). Hines (2012) found that the confusion was even more significant

among middle-aged heterosexual men and women than younger similar groups. Although younger heterosexual individuals had a less serious view toward online cheating, Hines (2012) found that the concept was confusing to middle-aged heterosexual men and more serious to middle-aged heterosexual women. Other researchers found that gender and sexual preference added further dynamics to the issue. To discover whether perceptions varied by gender and/or sexual preference in two age groups, emerging adults (21-29) and adults (30-45) with emphasis on individuals ages 30-45, a group who had not received much research attention, I sought to determine how men and women who preferred same sex relationships would view certain online activities as cheating and whether these individuals had a significant difference in these viewpoints from same-aged individuals who preferred mixed-sex relationships based on existing research.

A social change that made this study relevant was the legalization of same-sex marriage. I felt it was important to include the views of this group. Moller and Vossler (2015) emphasized how critical a socially current definition of infidelity is for sexual behavior research. I provided a historical baseline for measuring the viewpoint changes in the future of all of my studied groups. Jain et al. found that Internet infidelity rates could be as high as 35% of all individuals, regardless of preference, using the internet as a way to develop potential romantic relationships or encounters (Jain, Sahni, & Sehgal, 2018).

Potential for Positive Change

The use of Internet for sexual interactions has provided new opportunities for infidelity, which usually negatively affects committed and marital relationships. Through the results of the study, there was the potential for positive social change by

understanding how specific online activities are viewed by categories of individuals. Because of the many painful and negative reactions experienced by couples of all genders when confronted with partner infidelity, a better understanding of the varied ways reactions to infidelity are overtly and covertly experienced based on unique viewpoints may help counselors examine whether the individuals are coping with latent anger, depression, shame, isolation, eating disorders, prolonged grief, any other suppressed emotion in trying to silently cope with the effects of the relationship (Whitty & Quigley, 2008). The presenting problems described above may be the result of the underlying issue of online behaviors by the individual's partner that are known or suspected by the counselor's client (Whitty & Quigley, 2008). A better understanding of what infidelity means to people today, especially in the online context, can create positive social change by reducing the risk of mismatched definitions of infidelity between all couples and fostering an open discussion about online activities before a crisis.

Preview of Chapter 1

Chapter 1 includes a discussion of existing studies on online sexual activities. This chapter also includes the identified literature gap that I addressed in this study. This chapter also includes a discussion of the purpose of the study as well as the research questions and hypotheses posed in the study. This chapter includes a brief background of the theoretical framework and the research methodology employed in the study. Finally, this chapter ends with a discussion of the assumptions, scope and delimitations, and limitations as well as the definition of terms. The chapter also includes a summary that highlights the key points of this chapter.

Background

Summary of Research Literature

Religious thought has concerned itself with rules for (and against) sexual relationships which religious leaders teach to followers to help them abide by the established rules of the religion. Ucar et al. refers this teaching as creating cultural norms for the believers. (Ucar et al., 2016). The forerunners of the Internet, printed page, radio, movies, and television have all embraced sexuality as a vibrant subject for capturing the attention of a growing population. (Sheldon et al., 2015). The Internet was first introduced as Arpanet in the 1970's, a product of the U.S. Department of Defense (Castells, 2000). Both telephones, computers, and the internet were initially built for government and business. When telephones were adopted by individuals for social purposes, long social calls quickly overwhelmed network resources. When Internet use was adopted by the general public as a social network, a distinct change in how people used it for communication occurred. Fischer (1994) found that telephone users only called people they already knew. Consequently, the telephone helped individuals stay in touch with an already existing social network but did not expand the social network to unknown people. Arpanet, however, was far from an instant success except for some universities and the defense department.

Few households had Internet access in the 1990s. Less than 15 years later, 69% of households had Internet access (U.S. National Telecommunications and Information Administration, 2010). Individuals were no longer limited to predefined categories like those in the telephone book or encyclopedia but could search on any terms they wished.

By 1998, approximately nine million people were logging in daily, a number that grew by 25% every 3 months (Cooper et al., 1999). Goldberg (1998) determined that 15% of the logged-on Americans in April 1998 (57 million) logged on to the five most frequently visited sites containing sexual material. Today, over 1.5 billion people worldwide use the social networking site Facebook alone (Desai, Jha, Choudhury, & Garg, 2018), and Gemalto (2019) projects 4.1 billion internet users by 2020.

One of the earliest studies called the Internet an “erotic oasis” used primarily for finding love and sex by homosexual men and women (Tikannen & Ross, 2000, 2003). Daneback, Ross, and Mansson (2008) found that a larger percentage of men and women who consider themselves homosexuals use the Internet to pursue conversation about sex, find individuals to meet offline, to meet like-minded individuals, and for sexual gratification than men and women who identify as heterosexuals. Daneback et al. concluded that online sexual activities appeal to different categories of users that correlate to sexual identity and that the reasons given for engaging in these practices reflect needs and interests of the separate groups. Specifically, Tikannen and Ross (2005) found that while men were generally interested in visual activities, women seek interactive experiences. Comparing Tikannen and Ross’s results with Daneback et al. (2008), Internet use by heterosexuals for sexual purposes was less significant than homosexual individuals as homosexual men were four times more likely to use the Internet for online sexual activities, but no significant difference was found between homosexual and heterosexual women in their use of the Internet for sexual purposes. While Glass (2002) stated that over a 10-year period, 82% of heterosexual middle-aged

adults who sought help for marital and relationship problems had participated in offline infidelity behaviors. By comparison only 23% of middle-aged heterosexual adults pursued therapy for Internet-related issues including pornography and inappropriate online relationships (Hines, 2012). Moller and Vossler (2015) cited research that indicated the statistics of partner infidelity were highly dependent on the definition of infidelity presented. Moller and Vossler confirmed the importance of a current and relevant definition of infidelity, as they described “infidelity” as a social construct that varied over time.

Daneback et al. compared individuals who had private access to the Internet and individuals who had shared access to the Internet and their online sexual activities. Based on the results of the study, men who had private access to Internet-connected computers were more likely than those who had shared access to seek information about sexual issues. Ucar et al. (2016) suggested the need to conduct future research on how the Internet impacts infidelity behaviors between adult men and women regardless of their sexual preferences. This study is a contribution to that goal.

Gap in the Knowledge

I addressed two gaps in the literature in this study. Hines (2012) provided insight into the views of older heterosexual individuals and found significant confusion existed on whether certain Internet activities were considered infidelity. The younger counterpart of his study on heterosexual individuals saw many Internet activities as less serious. I built on the Hines’s study by including both heterosexual and same-sex individuals in committed relationships to determine of heterosexual participants’ viewpoints have

changed in any way since his study. Second, I examined the viewpoints of same-sex participants compare viewpoints of Internet activities and whether they felt these activities would be considered relationship infidelity. I also compared committed but unmarried and married individuals of both preferences.

Need for the Study

Legalization of same-sex marriage created a change in how same-sex relationships are viewed United States because this decision gave legal status with the same rights, benefits, and obligations as every heterosexual married couple. (Frederick & Fales, 2016). A significant contribution of this study was to show any attitude shifts of participants in the study compared to earlier studies. The study of same-sex individual's perceptions and comparison to perceptions of opposite-sex individuals at this historic time might matter to future researchers and an examination of whether married persons in same-sex relationships had significant changes in their views of online infidelity from their heterosexual cohorts. I identified a shift in definitions of online infidelity and measured the influence of age, gender, education, religious observance, and financial status on the responses.

Problem Statement

The general problem under study was what impact specific online behaviors have on perceptions of relationship infidelity. I examined what, if any, effect gender, age or sexual preference had on those perceptions. In some contexts, nearly a third of the population admits to having participated in some form of Internet infidelity (Jain et al., 2018). Social notions in the U.S. of what is acceptable can change quickly; in a 10-year

period, the perception of oral sex changed drastically, from 59% of the population not considering it to be sex to nearly 100% of the population considering it to be sex (Risman & Schwartz, 2002). The Internet allows easy connectivity between people across vast distances and social media services such as Facebook make it easy to encounter former partners or create new social bonds that can quickly develop into relationships (Nelson & Salawu, 2017). In some cases, emotional affairs that easily arise on the Internet remain emotional only; in others, they progress into physical affairs (Ucar et al., 2016).

The specific problem in the study was understanding what online sexual activities were perceived as infidelity at this time in married and other committed individuals (either same sex or opposite sex), based on age, gender, and sexual preference. Given the high social cost that can arise from failed relationships, including depression, divorce, single parent households, and other related issues (Shrout & Weigel, 2017) understanding this problem has significant social importance. Fisher (2016) states that infidelity has been a part of human behavior in all of recorded history. The Internet age represents an evolution in social and romantic paradigms that may have a significant impact on what cheating means. Some results have suggested that most people do not consider virtual infidelity to be as serious as physical infidelity (Lecker & Carlozzi, 2014) while others have found that physical and virtual affairs are of equal importance (Nooripour et al., 2017).

Internet infidelity is a relatively new problem. As early as 1996, research has sought to understand how heterosexual men and women view online sexual and emotional cheating behaviors (Harris & Christenfeld, 1996). In the early 2000s, Whitty

(2003) had already found that online or cybersex was considered to be almost as serious a cheating behavior as sexual intercourse, whereas viewing pornography online was considered completely different than online or cybersex. Lecker and Carlozzi (2014) added the emotional dimension separately and found that, in heterosexual couples, men and women placed different importance on the emotional component of cheating but considered physical sexuality more closely linked to emotional cheating than virtual sexuality. Thus, much data existed on young heterosexuals' online behaviors and viewpoints; much less was documented for homosexual or bisexual individuals and their beliefs about online behaviors. I addressed this lack of information by continuing the line of inquiry adopted by prior researchers such as Hines (2012), who studied a similar problem in the heterosexual context. Moreover, there was lack of empirical evidence on the differences in perceptions of online sexual activities between men and women, young and older adults, as well as heterosexual and homosexual individuals (see Ucar et al., 2016). The increasing dependence of people in using the Internet to connect socially warranted the need to examine age, gender, or sexual orientation differences in perceptions of online sexual activities specifically for same-sex relationships.

Purpose of the Study

The purpose of this quantitative, causal comparative study was to investigate and determine if there were significant age, gender, or sexual orientation differences in perceptions of online sexual activities that might be interpreted as relationship cheating. I compared the perceptions on online sexual activities based on gender and sexual orientation to explore whether the continuous variable of age was a significant covariate,

suggesting that there were differences in perceptions based on age. The independent variables in the study were age, gender, and sexual orientation, while the dependent variable was the perceptions of online sexual activities that may be interpreted as relationship cheating. An understanding of how these behaviors were perceived by individuals in committed relationships might help therapists create new approaches to treating the difficult problem of infidelity and the even more difficult problem to treat online sexual behaviors in increasingly diverse couples.

Research Questions

Research Question 1 (RQ1) – Age: Among individuals who are in committed relationships, are there differences between younger and older individuals' perceptions of online cheating?

Null Hypothesis (H_0): There is no significant difference between age groups in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Alternative Hypothesis 1 (H_a): There is a significant difference between age groups in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Research Question 2 (RQ2) – Gender: Among individuals who are in committed relationships, are there differences between males and females’ perceptions of online cheating?

Null Hypothesis (H_02): There is no significant difference between gender in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Hypothesis 2 (H_02): There is no significant difference between gender in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Alternate Hypothesis (H_a2): There is a significant difference between gender in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Research question 3 (RQ3) – Sexual Orientation: Among individuals who are in committed relationships, are there differences between heterosexual and homosexual individuals’ perceptions of online cheating?

Null Hypothesis (H_03): There is no significant difference between sexual orientation in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Hypothesis 3 (H_03): There is no significant difference between sexual orientation in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Alternate Hypothesis 3 (H_a3): There is a significant difference in sexual orientation in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Theoretical Framework for Study

I selected the sexual strategies theory (SST), pioneered by Buss and Schmitt (1993), as the theoretical framework for this study. The SST formalizes the concept of what motivates men and women to create relationships or marriages. Closely linked to Darwinian evolution theory, SST defines the differences between men and women in the process of mate selection. Early evolution theory required that men sought out women who had attributes that emphasized fecundity while women chose protectors and

providers. In the effort to discover how partner attraction actually occurs, the SST was born.

I chose the SST for its long acceptance in sexual research. Hines (2012) used SST to examine online and offline attitudes toward sexual behaviors in middle-aged adults who consider themselves heterosexual. Peterson and Hyde (2010) stated that SST is uniquely useful in identifying the particular behaviors that middle-aged adults relate to relationship infidelity. Understanding how and why individuals of any sexual orientation choose a partner may provide insight as to why they would risk the existing relationship by seeking a new partner through online interaction. This theory may be useful in predicting outcomes relating to online sexual values and practices (Dosche, Belayachi, & Van der Linden, 2016). More attention was directed to existing studies about sexual behaviors and attitudes of individuals who preferred same sex relationships with particular interest in studies that involved the middle-aged adults, and whether sexual orientation, age, or gender made a difference in viewpoints.

Two viewpoints exist on the SST. The traditional evolutionary view proposes that mates are selected based on men's ability to provide and protect and women's ability to produce offspring (Dijkstra, Barelds, & Groothof, 2013). The traditional emphasizes a short and long-term strategy difference. SST states men's short-term strategy needs the desire to mate with a variety of partners and the ability to quickly identify available partners who will require minimal investment. Men's long-term strategy involves assessment of the potential partner of a spectrum of qualities the man sees as desirable including fertility and the understanding that he will have a more significant obligation.

SST states women will seek out a man based on his ability to provide and protect. One thing that has not changed over time is the woman's investment in child bearing including physical investment, opportunity cost investment and the typical burden of ongoing care for the child. The second viewpoint of SST, the social-cognitive view, states that individuals will vary criteria for mate selection based on whether the goal is short time or longer time coupling as well as a variety of other individual values (Dosche et al., 2016). I sought to expand the SST theory through identifying how online sexual activities vary based on age, gender, and sexual orientation.

The relevance of the SST was several-fold. given that the SST postulated the differences between men and women in relationship-forming behaviors, the SST guided the choice of gender as a variable in this study. However, the SST intrinsically considered gender behavior through the Darwinian lens of mate-seeking. This raised the interesting question of whether the same postulates that characterizes the SST model of heterosexual relationships also modeled the sexual selection process in same-sex relationships. This was an especially interesting question given that the traditional SST model considers the ways in which opposite genders' mate-seeking habits interact. Therefore, it should prove interesting to see how these expectations hold up in the case where both sides of a relationship are the same gender.

Nature of the Study

Rationale for the Study Design

I used a quantitative research design to investigate and determine if there were significant age, gender, or sexual orientation differences in perceptions of online sexual

activities that might be interpreted as relationship cheating. A quantitative as opposed to a qualitative method was chosen for the study because the focus of the study was to analyze the difference in perceptions between identified groups objectively. An established survey instrument was used to measure the variables considered in the study.

Key Study Variables

The independent variables in the research questions were age, gender, and sexual orientation. Dependent variables were the severity rating (whether an activity is considered relationship cheating by the respondent). Ratings were made for sexual cheating, emotional cheating, pornographic cheating, and overall cheating.

Summary of Methodology

I adopted an online survey method to assess the target population of 21-45-year-old individuals of any sexual preference who were in a committed relationship as defined married (or having been married) or living together and were currently residing in the United States regardless of country of origin. At least 128 participants were included in the study based on the minimum sample size calculation using G*Power v3.1.0. I asked participants to complete the online survey questionnaire in SurveyMonkey. Prior to being directed to the survey instrument, I asked participants to agree to an informed consent form. I imported responses of participants to SPSS v21.0 to prepare for data analyses. The data analyses included descriptive and inferential statistics and a Manova with sexual orientation (heterosexual versus homosexual), gender (male versus female), and the covariate of age serving as the independent variables and perceptions of cheating (sexual,

emotional, pornographic, and overall) serving as the dependent variables. All analyses had a minimum significance level of .05.

Definition of Terms

These are the definitions of terms used in this study:

Chatroom: A branch of a computer network or a software application in which participants can engage in real-time discussions about a specific topic with one another (Hines, 2012).

Cheating: The occurrence of sexual involvement with a third party that violates the ground rules established by a couple (Whitty & Quigley, 2008).

Cyber-cheating: Internet sex, online sex, masturbating while having cybersex; equivalent of phone sex; simulated sex activities (Henline, Lamke, & Howard, 2007).

Cyberspace: The realm of electronic communication; virtual reality (Hines, 2012).

Emotional infidelity: Personal intimacy with someone other than your spouse or partner (Henline et al., 2007).

Internet infidelity: A romantic and/or sexual relationship with someone other than the spouse or committed partner, which begins with an online contact and is maintained mainly through electronic conversations that occur through e-mail and chat rooms (Hines, 2012).

Middle age: Individuals who are between 30- to 45-years-old (Erikson, 1994).

Monogamy: Marriage with only one person at a time. The practice of having only one mate at a time (Hines, 2012).

Online sexual activity (OSA): Use of the Internet for sexual stimulation (Docan-Morgan, 2008).

Online sexual cheating: Participating in imaginary sexual behaviors with someone other than spouse or committed partner (Docan-Morgan, 2008).

Assumptions

There were several assumptions inherent in the study. I assumed that volunteer participants were willing to honestly and completely answer all questions as related to their sexual attitudes, perceptions, and behaviors. I further assumed that the study participants would understand what they were asked to do. I used an established, validated instrument designed specifically to measure these issues.

The analysis of the study was based on the responses of participants in the survey questionnaire. I assumed that participants understood the survey items correctly. Without this assumption, it was impossible to conduct a meaningful analysis of the data. Therefore, a meaningful analysis required that the participants' answers were taken in good faith. Another necessary assumption included that sampling would allow for a relatively reasonable cross-section of the population. This assumption was necessary because there was no easy way to tell whether a significant set of responses was missed by the study due to its anonymous, voluntary nature.

I assumed that the sample data was sufficient size to form generalizations to a larger group. G*Power analysis helped ensure that sample size would allow inferences could be made to a larger population. Lastly, I assumed that the size of the survey instrument would not discourage study participation nor prevent volunteer participants

from providing honest answers. This was necessary because the survey questionnaire used in the study was a pre-validated questionnaire; it would not be feasible to create a new instrument within the scope of this study, validate that instrument, and still conduct the overall desired research. Because the survey instrument has been used by the survey authors as well as other researchers, I assumed the Docan-Morgan instrument was sufficiently tested for reliability and validity in measuring the constructs.

Scope and Delimitations

Delimitations represent intentional limitations placed on the scope of the study, as opposed to unavoidable issues inherent in the phenomenon or methodology. The present study was delimited in several ways. This study was delimited to defining online relationship cheating behaviors among adults in specified age groups because the research problem sought to identify changes in perceptions of cheating in this population. Other researchers had conducted studies using a heterosexual population and I wanted to expand on the literature by extending it to same sex relationships and looking for differences in perceptions of cheating behaviors between the groups. The participants were delimited to people in the age range of 21-45 years. Participants also needed to be involved in a (self-described) committed relationship, either now or in the past to ensure relevance of their experiences and perceptions to the research problem.

These were the only relevant demographic delimitations. Participants came from a variety of cultural and ethnic backgrounds, varied socioeconomic levels, varied educational and maturity levels, any sexual preference, male and female genders, and limited to those adults meeting the age criteria. Participants likely had many varied sexual

experiences, were married, were divorced, had children, and might even have had a different sexual orientation at some point in their lives. I hoped that results from this study would generalize to committed heterosexual and homosexual couples with online access to other individuals with whom the potential existed to engage in cheating behaviors. Chapter 3 has further discussion of the scope of the study.

Limitations

Limitations represent essentially unavoidable ways in which the study is limited. Limitations are inherent in either the phenomenon or the methodology; therefore, there were several limitations involved in the study. First, caution must be used in generalizing as responses were anonymous, random and consisted of self-reported survey data gathered from a convenience sample. This created the potential for self-selection bias on the part of the participants. I did not feel it would be either feasible or ethical to use a non-self-selected sample. Additionally, sexuality and fidelity were issues that might lend themselves to social desirability bias. The anonymous reporting through survey questionnaires should serve to limit the degree of social desirability bias, but the possibility remained.

Another methodological limitation was that only those beliefs, attitudes, and perceptions of the study participants, which were measured by the survey instrument, were evaluated. Other variables could influence the result, such as influence of peers, parental training, religious beliefs, self-image education, or financial status. This limitation was fundamentally unavoidable because no study could feasibly consider all

potential predictors, and with any questionnaire, there would remain behaviors that related to online or offline infidelity activities, which fell outside the survey instrument.

The results of the study might be biased to the target population considered in the study. The results might be biased to experiences, beliefs, and perceptions of participants on online sexual activities considered in the survey questionnaire. The results of the study would only be generalized based on the sampled population, age groups, sexual preference and the definitions of online sexual activities in the survey questionnaire. This limitation was inherent in any research which sought to sample less than the entire population. However, descriptive statistics in the data reporting should serve to characterize the participants, and therefore inform future researchers seeking to apply the results of the context in which they were obtained.

Significance

I contributed to the gap in the knowledge of how gay men and lesbian women perceive certain online sexual behaviors at a significant moment in time when same sex marriage was law and how those perceptions compared to heterosexual men and women. I also further defined “infidelity” as it might relate to online Internet activities. The purpose of this study was to compare the attitudes toward “cyber” or “online cheating” where the individuals interacted through electronic means and not necessarily in person although such behavior might lead to in-person contact. Either the individuals involved, or their committed partners might consider some of the behaviors of the cyber-participants as relationship infidelity. At least one group of researchers defined infidelity as the “use of sexual energy outside of a committed relationship, regardless of the type or

purpose, in a way that would erode the integrity of the relationship if discovered” (Russell, Baker, & McNulty, 2013, p. 242).

A study goal was to assess attitudes and opinions of gay and lesbian individuals about what online activities constituting cheating behaviors might look like and whether it differed from heterosexual persons in the same stage of life. Lecker and Carlozzi (2014) found that definitions can dramatically change the percentage of heterosexual men and women who disclose behaviors that might be interpreted as infidelity. When Brand, Markey, Mills, and Hodges (2007) changed the description of infidelity to “any form of romantic and/or sexual involvement, short or long-term, including kissing, while the individual is in a relationship with another person” (p. 104), the number of female college students disclosing incidents of infidelity was 31.4% compared to 24% for male college students. This was significant because historically males had identified higher incidents of infidelity. Lecker and Carlozzi (2014) attributed this shift to the societal changes in the United States where more women are working at jobs that make them self-sufficient and conversations about sexuality are openly held in all forms of media.

Another phenomenon, the anonymity of the Internet, created a more accepting venue for some individuals to openly explore ideas and activities (Daneback et al., 2008). Non-heterosexual groups find that the Internet’s implied privacy offers protection from discrimination and stigma (Chiasson et al., 2006). A minimum of effort allows all groups to find partners or friends that meet the generally accepted requirements of propinquity (geographic desirability) and homography (individuals who share backgrounds, interests, culture, religion, or other factors important to the seeker) Myriad sites and cell phone

apps now exist, with more each day, to assist in the process of finding a person for the purpose of the seeker's choice. Harris Interactive (2007) found that LGBT individuals were far more likely to post a profile on dating sites than heterosexual individuals.

The results of the study contributed to existing knowledge on how different demographic groups perceive online sexual activities as relationship cheating. I built on the results obtained of the study on Internet cheating behaviors by Hines (2012) by including perceptions of same sex couples, looking for changes in opposite sex couples. I expanded on the existing literature and contributed to a gap in that literature. The issue of Internet fidelity proved of clear importance given the prior research into the topic for heterosexual couples, making the lack of such research on the important demographic of same-sex couples a gap that this study helped fill.

The study is important because infidelity is a social problem. Infidelity is an old problem. In the ancient world, infidelity could bring with its harsh penalties up to and including death (Reed, 2016). Indeed, such severity is still attested to in some parts of the world today, and while no Western nation takes such a harsh stance, infidelity remains a crime in several states (Reed, 2016). This makes the definition of what constitutes infidelity is of paramount importance, and the advent of the Internet has clouded that answer. Infidelity can lead to failed relationships, and thus to consequences such as depression, divorce, single parent households, and other related issues (Shrout & Weigel, 2017). This makes it an issue of clear social relevance. Frederick and Fales (2016) illustrated differences between same-sex and opposite-sex couples regarding reactions to different kinds of infidelity in the traditional setting. Considering the detrimental effects

of infidelity, a better understanding of how different groups perceive it in the online context can lead to positive social change by creating a more open dialogue between couples and by making mismatched definitions of infidelity less prevalent in the general population. This, in turn, may reduce rates of infidelity and potentially enable better interventions for identifying the risk of infidelity and preempting it whenever possible.

Summary

Chapter 1 considers the previous research on the intrusion of electronic opportunity into the ages old problem of relationship infidelity among all people including individuals who prefer same sex partners or who consider themselves to be homosexual. While voluminous research exists on heterosexual relationship infidelity, much less has been done on the more recent phenomenon of cheating behaviors that are online or electronic. Even less has been studied on middle-aged persons as it pertains to infidelity. Less research exists on the middle-aged groups of individuals who prefer same sex relationships and electronic cheating activities. With same-sex marriage now legal, it is important to understand how this group views various cheating behaviors if counseling professionals are to provide better services to these partners in a relationship crisis based on perceived or acknowledged infidelity. Existing studies have considered how the Internet is used for sexual activities and how gender, age, and sexual orientation have played a role in defining online sexual practices.

Chapter 2 provides a review of related literature on online sexual activities and relationships. Chapter 2 also provides details on the SST that will be used to guide the

study. In Chapter 2, I discuss the identified gap in literature, which warrants the need to conduct the study.

Chapter 2: Literature Review

Introduction to the Literature Review

As the Internet reaches almost everywhere, people across the world gained a platform by which to communicate, so long as access was available. A myriad of networks, from social media to discussion boards to informational websites, served as a way for people to interact based on friendships, business relationships, idea exchanges and even sexual experiences. However, particularly within the topic of mate selection, the Internet has introduced varying levels of confusion and suffering resulting from the violation of cultural traditions (Hays, 2008). A component of these traditions is infidelity, and certain online behaviors may constitute as cheating, due to the shift in cultural traditions. I was interested to determine in this study how online behaviors might be perceived as cheating by individuals who prefer homosexual relationships versus heterosexual relationships. Moreover, my focus was on whether differences in perceptions between those seeking homosexual and heterosexual relationships differed significantly concerning what constituted infidelity via the Internet.

In this quantitative study, I considered the problem of how individuals, ages 21-45 perceive specific online behaviors that might be emotional or sexual in nature. I was very interested on discovering how middle-aged men and women, ages 30-45 would respond to the survey questions and how their perceptions might differ from their same-aged, heterosexual counterparts. The generational group of ages 30-45 consisted of nearly 50% of the population and has been generally overlooked for research about sex and relationships. (Census Reporter, 2015). Due to this bias, there still exists a research gap

about sexual issues as they pertained to the generations between ages 30-45. I sought to integrate existing research about one particular aspect of relationships, infidelity, with data about associated attitudes with how the Internet impacts relationship behavior.

This chapter begins with information about the literature search strategy, followed by a discussion about the theoretical framework of the study. The SST (Schmitt, 2003) includes two components, the evolutionary approach, and the social-cognitive view, which were both reviewed in this chapter. Information about the study's key variables, followed by previous studies concerning relationship infidelity, the definition of online infidelity and different rules for electronic infidelity are located in this chapter. Additional literature review provides insight into jealousy, attachment, betrayal, and cyber activity as betrayal. I have included additional research about each group, gender, and orientation for background purposes, as well as to establish the foundation for a comparison to results of a study using the Docan-Morgan and Docan (2007) survey instrument with heterosexual individuals. I reviewed the historical and scant current research about middle-aged, same-sex couples and online behaviors, as well as the research about concurrent personal effects on individuals due to online behaviors. The chapter follows with a synopsis of the literature, as well as information about current treatment philosophies and integrative behavioral couple therapies. The chapter concludes with a chapter summary.

Literature Search Strategy

The literature review search strategy consisted of an electronic search for peer-reviewed articles on Google Scholar and Walden University's psychology databases,

including PsychArticles, PsycINFO, SocINDEX, and Psychotherapy.net. Additional resources included Wiley Online and the APA journals. Key search terms used included *online infidelity, homosexual infidelity, extradyadic encounters, extradyadic relationship, online sex, online chat, same-sex infidelity, relationship cheating, cheating, online dating, same-sex online, and online statistics*. I found several useful citations in various textbooks.

Literature reviews included information from times of early Internet use to the present, which spans the years of 1998-2019. I wanted to include the early years of the Internet as a tool used for sexual activity. Research concerning heterosexual online use and infidelity, or relationship cheating was abundant, whereas research about what constituted relationship cheating in same-sex relationships is significantly less available. I used older research for background and for historical perspective, whereas current literature serves as a contrast. Research concerning the current time is particularly relevant due to the introduction of same-sex marriage. This change made relationship dissolution much more difficult, and often exceedingly costly, as seen in high-profile celebrity cases.

Theoretical Framework for the Study

The theoretical framework for this study was the Sexual Strategies Theory, SST, pioneered by Buss and Schmitt (1993). The SST (Schmitt, 2003) formalized concept of what motivates men and women to establish committed relationships or marriages. Closely linked to the Darwinian evolution theory, SST (Schmitt, 2003) defines the psychological differences between men and women in the process of mate selection and

human mating strategies. According to Darwinian evolution theory, the survival of a species relies on its ability to procreate (Buss, 1998, p. 19). This species survival need is why there is such a strong emphasis on the role of sex and, consequentially, reproduction. If the members of a species do not reproduce, the species will not survive. Moreover, if the species is to reproduce, it is more likely to survive if the offspring receive the most desirable physical and mental characteristics, like strength, agility, fertility, and intelligence. SST shares similarities with early evolution theory, which supports that men sought out women who possessed characteristics that emphasized fecundity, while women chose men who possessed characteristics that emphasized the abilities to protect and provide. SST (Buss & Schmitt, 1993) provides insight into the characteristics that motivate mate selection, considering both the primitive via its evolution-based perspective and the cognitive via its cognitive-based theory.

SST (Buss & Schmitt, 1993) applies to the context of this study because it may help determine why partners may partake in behaviors that can jeopardize their relationships. Peterson and Hyde (2010) stated that SST (Buss & Schmitt, 1993) is uniquely useful in identifying the particular behaviors that middle-aged adults associate with relationship infidelity. Understanding how and why individuals of any sexual orientation choose a partner may provide insight into why they would risk the existing relationship by seeking a new partner through online or offline interactions. More recently, Frederick and Fales (2016) used SST to predict that same-sex couples would not have the same gendered difference in reactions to different types of infidelity (emotional or physical) and the results of their research supported this hypothesis. Whereas

heterosexual men and woman differed significantly in how upset they were, homosexual men and woman did not significantly differ.

This is likely because, as Buss (2018) argued, men and women have evolved in most sexual selection strategies in responses to different biological needs. In same-sex relationships where reproduction was no longer a relevant issue biology has little influence. Therefore, there was evidence that SST might have less relevance in explaining the differences in sexual selection between same-sex and opposite-sex couples. Accordingly, this theory was useful in predicting outcomes relating to online sexual values and practices. I placed more importance on existing studies about sexual behaviors and attitudes of individuals who preferred same-sex relationships with particular interest in studies that involved middle-aged adults, and whether sexual orientation, age, or gender affected the perspective of such.

Short-Term Goals

SST (Schmitt, 2003) was created to discover the basis of partner attraction. According to Buss (1998), there are specific criteria that outline the basic premises of SST (p. 24). First off, both men and women maintain a strategic inventory of short- and long-term sexual strategies (Buss, 1998, p. 24). The short- and long-term strategies focus on mating and the possibility of producing offspring, with short-term gain emphasizing the sexual experience and long-term gain emphasizing the establishment of a family. Short-term strategies, according to Buss (1998), consist of men having sex with many partners, which depends on the criteria that these partners are sexually accessible, these partners are fertile, and the men have a low level of both commitment and investment to

these partners (p. 24). According to SST (Buss & Schmitt, 1993), the man exhibits short-term sexual strategies to yield a high number of children in a short period of time. For example, if a man has sex with 100 women in 1 year, he has the potential to have 100 offspring. However, due to the 9-month pregnancy period, if one woman were to have sex with 100 men in one year, the outcome would be one child (unless multiple infants from 1 pregnancy) and possibly achieve a second pregnancy. (Buss, 2017). Clearly, this behavior is no longer comprehensible in the modern day, but during the early days of humans, this was advantageous, as the more offspring that were produced, the greater likelihood for some of these offspring to survive challenges like disease, attacks from predators and famine (Buss, 2017). Therefore, biologically, it makes more sense for men to desire having sex with multiple women, as the more partners he engages with, the greater his chances of reproduction. However, although women are less likely to partake in short-term mating, SST (Buss & Schmitt, 1993) supports that short-term benefits exist for women as well. These benefits include the availability of resources for both the woman and her family; mate “insurance,” meaning the woman remains protected and secure if her immediate mate were to become ill, pass away or detach himself from the relationship; and the woman’s children are likely to receive genetic benefits that result from mating with desirable men (Buss, 2018). Conclusively, the man’s short-term gains surround access to sex partners and sometimes procreation, while the woman’s gains protection of herself and her family.

Long-Term Goals

Long-term mating requires closer consideration and behavioral assessment than short-term mating. This is because long-term mating often requires a level of commitment and investment on behalf of both partners. Due to this notion, partners wish to select the most desirable mate with the most desirable qualities to reap high benefits, according to SST (Buss, 2018; Buss & Schmitt, 1993). From the male perspective, long-term strategies require the following:

1. identifying reproductively valuable women,
2. ensuring increased probability of paternity,
3. identifying women with good parenting skills (Buss, 1998, p. 24). According to SST (Buss & Schmitt, 1993), females have an even longer list to consider when pursuing long-term strategies. In order to benefit from long-term sexual strategies, female must solve the following concerns:
 4. identifying men who have the ability to acquire resources,
 5. identifying men who display a willingness to invest these resources in them and their children,
 6. identifying men willing to commit to a long-term relationship.
 7. identifying men willing to protect them and their children from aggressive members of the same species,
 8. identifying men with good parenting skills. (Buss, 1998, p. 25)

Despite the primitive basis of SST (Buss & Schmitt, 1993), all these long-term criteria for both men and women play a significant role in the establishment of committed

relationships in the modern day. Because women serve as the carriers of the offspring, their criteria do not include concerns over whether the child is biologically tied to them. The biological tie, on the other hand, remains a concern of the man, as men particularly in the primitive days, faced the possibility of caring for and protecting a child that was not biologically his own.

Van Hoof (2017) cited evidence that committed long-term relationships retain traditional rules about monogamy despite figures showing that 25% of men and women in a relationship “do not share the same levels of interest in sex as their partner” (p. 850). Further that “for young women it is almost always accompanied by traditional expectations of sexual fidelity” (Van Hoof, 2017, p. 850).

Compromising of Short- and Long-Term Strategies

There are scenarios where short- and long-term sexual strategies are compromised. These scenarios often follow the insufficiency of a mate to perform as expected or the decision of a mate to detach from the relationship, whether by choice or due to illness, injury, or death (Buss, 1998, p. 25). To compromise for these insufficiencies, both men and women establish short-term liaisons to coincide with their long-term sexual strategies, though often ensuring that the consequences of the liaisons are low, and the benefits are high (Buss, 1998, p. 25). An example of a short-term liaison may include, for instance, a woman pursuing a relationship with a man who may provide resources if the woman’s current mate is insufficient at providing or is likely to fall ill or pass away (Buss, 1998, p. 25). This sort of scenario may occur, for example, if the male partner is spending a considerable amount of his time working, and while he is providing

for his family financially, he may be inadvertently neglecting the emotional needs of his spouse. The woman, therefore, may form an emotional-based relationship or friendship that serves to provide the emotional attention that she is lacking from her spouse.

Negative consequences of short-term liaisons with suitors outside of the relationship, however, may consist of the other partner learning of the affair and, perhaps, choosing to end the relationship, or damage to one's reputation (Buss, 1998, p. 25). The decisions to partake in these short-term liaisons, however, are at the discretion of the individual, and the consequences may vary, depending on the couple's definition of infidelity.

There are currently two viewpoints that exist concerning SST (Schmitt, 2003). These viewpoints include the traditional evolutionary view, while the second viewpoint is the social-cognitive view. The traditional evolutionary view proposes that mate selection primarily considers the man's ability to provide and protect and woman's ability to produce offspring. The evolutionary view is simplistic in nature and perceives mate selection in terms of the most foundational and primitive purpose for heterosexual relationships, which essentially is the ability to procreate and continue the species. The second viewpoint of SST (Schmitt, 2003), the social-cognitive view, states that individuals will vary criteria based on whether the goal is short-term or long term-coupling, as well as a variety of other individual values. The social-cognitive view considers factors aside from merely the primitive, which may consider an individual's characteristics, attributes, and flaws. However, both perspectives entail separate areas of the SST (Buss & Schmitt, 1993), and, for this reason, both contribute to the development of the theory as it exists today.

Sexual Strategies Theory: The Evolutionary Approach

SST (Schmitt, 2003) is part of a larger evolutionary theory of Darwinism's "survival of the fittest" and natural selection. According to evolutionary theory, the process of mate selection is primitive, in that it entails men selecting women with the ability to bear children, and women selecting men with the ability to provide and protect their families. Due to the involvement of offspring in this perspective, a premise of SST (Schmitt, 2003) is the concept of parental investment as part of its behavioral modeling. According to Trivers (1972), parental investment is defined as "any time, energy or effort expended to aid the survival and reproduction of one offspring at the expense of other forms of investment, such as effort devoted to intrasexual competition" (p. 136). Therefore, Trivers's (1972) theory supports that parental investment requires sacrifice on behalf of the parents. For the man, this entails decreasing his reproductive value, which often includes a decrease in sexual behavior, particularly in the modern day (Buss, 1998, p. 21). For the woman, on the other hand, this entails devoting her body to the reproductive process and ceasing of sexual relationships with outside partners (Buss, 1998, p. 21). This perspective does not necessarily comprehend the purpose of homosexual relationships as emotional-based connections, as it sees relationships as functioning to ultimately produce offspring. As homosexual relationships cannot produce offspring within themselves, they do not fulfill the biological nature of mate selection.

Due to the range of options that are now available to both individuals and people in committed homosexual or heterosexual relationships concerning children, this theory may not necessarily apply fluidly to the modern human race. First, modern western

society has made it possible for women to become financially independent. In other words, females may now receive an education and develop their own careers, and ultimately do not need to depend on a man's resources for survival. In this sense, women are now able to fulfill the man's role as both the provider and protector for their children, as well as the woman's role as nurturer. Science has also provided the means to empower women to choose whether they wish to have children. Moreover, not only may women maintain the power to choose whether they wish to bear children, but they can also control how many children they wish to have. In modern society, the traditional notion of the nuclear family and childbirth following marriage has almost dissolved. Women no longer carry the same social stigma surrounding "unwed mothers" and having children out of wedlock. In today's world, women even can decide to have children without a male counterpart present through the availability of sperm banks or decide to have no children at all. This scenario, in particular, entirely circumvents the evolutionary process, as the woman can select the sperm of the ideal mate, according to her preferences, and execute the entire process of motherhood without the presence of a male figure. These technologies enable women who cannot bear children, are beyond reproductive years or wish to avoid pregnancy altogether through surrogacy, in addition to individuals in homosexual relationships, to consider the option of adoption, surrogacy with or without the genetic material of one of the partners. Lesbian couples can choose the same options or can choose for the most willing or appropriate partner to bear a child with donor sperm.

Due to scientific and societal advances, particularly in the independence of women, men are no longer required for women, as individuals to establish their own families and provide for such. A man's brute strength today is rarely required to protect his family members from wild animals, as in primitive times. The evolutionary theory of SST (Schmitt, 2003) still maintains a level of truth today. According to this theory, males may still seek a partner that he finds most attractive, while women may still consider a male's earning potential or value the feelings of protection associated with the man. These criteria may appear modern, but realistically, they stem back to the most primitive desires for the formation of committed relationships and their potential for stability and growth.

Further confounding the SST theory (Schmitt, 2003) is that sexual behaviors are often separated from parental investment in same-sex groups. Primitively, the significance of a heterosexual relationship is to produce offspring and continue the human race, as previously stated. In homosexual relationships procreation where both partners are biological parents to the child is not possible. The relationship itself is usually not formed with the objective of producing offspring. Sometimes one or both partners have biological children from previous relationships.

Adoption offers homosexual couples the ability to circumvent biology and begin their own families. The presence of a fertile woman is not necessarily needed for male, same-sex relationships and female, same-sex relationships, as discussed earlier. Other options, from adoption to in-vitro fertilization or surrogacy and even embryo selection (Kushnir, Barad, Albertini, Darmon, & Gleicher, 2017, p. 7). These alternative

reproductive options are recognized as assisted reproductive technology (ART) practice (Kushnir et al., 2017, p. 2). Science has granted the modern-day individual in western societies the ability to choose, in all aspects, if they wish to start a family and, if so, how to go about family planning in a manner that is most suitable for the individual, even if the individual is not currently in a committed relationship of any sort.

According to SST (Schmitt, 2003), women, who are responsible for bearing children, are also responsible for selecting the best possible mate to ensure the survival and safety of their offspring. However, when comparing this notion to the older spectrum of the study group (ages 30-45) evaluation of a potential mate is not necessarily linked to parental suitability. The older portion of this age range, acknowledged as middle aged, have likely already produced, or adopted offspring. Moreover, although the evolutionary approach of SST (Schmitt, 2003) assumes that most men are driven to engage in sexual activity due to the primitive need to ensure the survival of their genes and the human race overall this does not apply to the latter part of this study group, as other factors supersede this objective. If mate selection were to occur between ages 45-60, for example, the prime focus would most likely not revolve around parental suitability and the relationship, instead, would be primarily emotional based. The consideration of offspring is still relevant for the first half of the middle-aged group, however, due to the primitive components associated with the evolutionary approach, its characteristics may not adequately apply to the groups who have little to no interest or investment in producing progeny, regardless of sexual orientation.

Sexual Strategies Theory: Homosexuality

Many of the traditional conclusions of SST simply do not apply any longer in the context of a homosexual relationship (Buss, 2018). In heterosexual relationships, Frederick and Fales (2016) found that 54% of heterosexual men were likely to upset by sexual infidelity compared to only 35% of heterosexual women, whereas 65% of heterosexual women were highly upset by emotional infidelity compared to only 46% of heterosexual men. These results held true regardless of several demographics, including age, race, income, and history of being cheated on. By contrast, bisexual men and women in the study had similar levels of being upset over emotional infidelity (30 vs. 27%), as did homosexual men and women (32 vs. 34%). This is consistent with the evolutionary view of SST, in which traditional perspectives on mating and sexual selection supercede parentage issues. In addition, however, these results may have a social side, in that “gay culture,” as defined by McKie, exists in many places and this culture has a generally different view of infidelity as a whole (McKie, Milhausen, & Lachowsky, 2017). This does not apply to all homosexual couples but may explain some of why bisexual and homosexual concern over infidelity was generally lower than that of heterosexuals of either gender in these cited studies.

Sexual Strategies Theory: The Social-Cognitive View

The SST (Schmitt, 2003) maintains a second perspective about adult sexuality. This theory asserts that middle-aged adults will consider alternative concepts that align with their values and identities they possess as individuals. This assessment pertains to the concept of short- and long-term strategies for mate selection. This perspective also

recognizes factors that exist outside of the ability to procreate and parental suitability and acknowledges mate compatibility due to additional factors, including personality, lifestyle, vocation, attitudes, and life goals. Arguably, the social-cognitive view of SST (Schmitt, 2003) maintains a perspective that more adequately adheres to the modern generation.

Countless studies have identified the methods used by potential mates for mate selection, and how these methods differ by gender (Russock, 2011). According to this theory, men tend to utilize a short-term strategy: one that allows for quick access to sexual activities and sometimes fecundity, as previously stated. On the other hand, women tend to utilize a long-term strategy: a process that is consistent with protection, provision for themselves and relationship commitment (Buss, 1998; Buss & Schmitt, 1993; Schmitt, 2003). In homosexual relationships, the discussion concerning reproduction is essentially unnecessary, as offspring can be adopted or produced by artificial insemination or surrogacy. Particularly in circumstances of artificial insemination or surrogacy, one of the homosexual partners may choose to contribute his or her sperm or egg, creating a genetic link between this parent, while the non-biologic parent faces the loss of contact or influence over this child in the event of relationship dissolution. This phenomenon further contributes to the attitudes that may be established toward sexual fidelity in individuals who may be or have been in same-sex relationships, because they may also confront the concept of parental investment: a consequence of societal changes and the progression of medical technology.

The second component of the social-cognitive view of SST (Schmitt, 2003) is more appropriate for modern, middle-aged individuals, whether heterosexual or homosexual. If married or in a committed relationship, this age group has had time to experience and possibly lose the early excitement of their relationships and progressing to monotony. Boredom with the relationship may exist due to life challenges being injected into the relationship, and since each partner is so familiar with the other, this allows some partners to perceive one another more realistically than when their emotional ties were newer (Atkins, Baucom, & Jacobsen, 2001; Hines, 2012). This is commonly referred to in as the “honeymoon phase,” when realistic perspectives are clouded by the desire to be with the person. According to Reese-Weber (2015), the honeymoon phase is defined in the first-person perspective as:

The relationship between my partner and me is still very new and exciting. Often, when I am trying to concentrate and work on something, my thoughts wander to my partner. Before seeing my partner, I take extra care of my appearance in order to look my best. My partner and I are very tolerable of each other’s faults. (p. 209)

Middle-aged individuals in established relationships are less likely to experience the honeymoon phase. Lack of the honeymoon phenomenon and the fact that middle-aged individuals have the time and money to engage in encounters outside of the primary relationship, whether real or virtual, where they may seek extramarital experiences that can yield similarities to the honeymoon stage (Bersanding et al., 2009). With the Internet becoming ubiquitous and with technology established as a part of people’s daily lives via

smart phones, tablets and computer systems, confusion has risen over whether and how virtual encounters may constitute infidelity (Whisman, Dixon, & Johnson, 2007). This confusion exists in terms of the boundary between what is deemed as acceptable virtual behavior and what a partner would classify as cheating behavior that may evoke damage to the relationship. Unlike their adult or college-aged children, these middle-age adults were not raised during a time that was infiltrated with the cyber world and its constant and instant change (Knox, Vail-Smith, & Zusman, 2008). These theoretical frameworks, along with the information provided in this study, were used to examine the participants' viewpoints by use of the Docan-Morgan Internet Infidelity Questionnaire (DMIQ) and the Sexual Opinions Survey (Short version; Docan-Morgan & Docan, 2007) to determine whether the motivation for and attitudes toward online sexual activity was different among individuals in homosexual relationships versus that of individuals in heterosexual relationships and how these attitudes might vary by age, gender, or orientation.

Review of Literature

Previous Studies About Relationship Infidelity

DeSteno and Salovey (1996) argued that two types of relationship infidelity exist: sexual infidelity (SI) and emotional infidelity (EI). This theory centers on the stereotypes that assume women only have sex with someone with whom they have an emotional attachment with, whereas men often have sex without emotional attachment. DeSteno and Salovey (1996) predicted that men would assume that if sexual infidelity had occurred with their relationship partner, that emotional infidelity was also present. Women, by contrast, would assume that if their relationship partner had experienced emotional

involvement with another partner, that sexual infidelity was also present. Men were typically more distressed by the possibility of sexual infidelity, while women were more distressed by emotional infidelity, as according to the research of DeSteno and Salovey (1996). However, despite the emphasis on sexual or emotional relationships, this theory assumes that both variables of infidelity are likely to exist if one currently exists.

Additional scholars soon contemplated whether these perspectives varied by sexual orientation.

Dijkstra et al. (2013) chose to exercise this contemplation by testing this theory on homosexual men and women. Dijkstra et al. expected to uncover that homosexual individuals would exercise the same stereotypes as heterosexuals. Dijkstra et al. proposed that homosexual men would generally use the same stereotype as heterosexual women (i.e., if their male partner was emotionally involved with another partner, sexual infidelity, as well as emotional infidelity) had occurred, but if the partner was only disloyal by means of having sex, this did not necessarily suggest that emotional infidelity had occurred. Furthermore, homosexual women would believe that if their partner had committed sexual infidelity, that emotional infidelity had also occurred, but an emotional involvement with another woman did not necessarily imply sexual infidelity. Dijkstra et al. also distinguished that these differences are the result of a cultural stereotype that was not intended to imply that homosexual women are more likely than heterosexual women to have male characteristics or that homosexual men are more likely to possess female characteristics. Therefore, it cannot necessarily be determined whether a man or woman's

choice to exercise a homosexual relationship will automatically merit these stereotypical perspectives in situations of infidelity occurrence or speculation.

Bailey, Gaulin, Agyei, and Gladue (1994) appears to be one of the few early researchers to examine the differences in attitude toward SI and EI in both heterosexual and homosexual relationships in both genders. Bailey et al. findings concluded that homosexual women did not differ from their heterosexual cohorts in their distress over emotional infidelity. However, homosexual men reported much more distress over emotional infidelity than heterosexual men. Another conclusion made by Turke (1990) stated that heterosexual men demonstrated greater distress over sexual infidelity than homosexual men. Turke attributed this difference to the notion that children are not a genetically binding link between the homosexual partners, and, consequentially, their resources were not at risk in similar means that a sexual infidelity would pose for a heterosexual man who is genetically linked to children. An ensuing divorce, often a consequence of infidelity, would likely place the heterosexual man's resources at risk and evoke limitations to his contact with his children. However, modern same-sex marriage legislative change likely equalizes Turke's conclusion as same-sex marriage has placed similar risk to resources and limited contact with children, a factor that did not have the same influence on homosexual individuals prior to 2016. However, there is still a great deal of information to consider, as no single straightforward answer has been uncovered about how heterosexual and homosexual partners perceive EI and SI in relationships. Millar and Baker (2017) concluded that men were more likely to abandon a relationship after sexual infidelity than emotional infidelity and were surprised that their research

discovered the opposite action was more likely to be chosen by women when emotional infidelity was identified. Millar and Baker used a new concept described as “mate value” to look at these older concepts in a new light. In their study of behavioral responses to infidelity, both SI and EI, was predicated on how the offended partner valued a mate in general. For instance, in Miller and Baker’s conclusions, men were most likely to feel that a partner who committed a physical infidelity had less or no future value and were therefore more disposed to abandon the relationship whereas the offended female partners measured present or future value by emotional infidelity.

While older studies provide some insight to online infidelity, the current generation of middle-aged adults differs dramatically from that of their parents. Today’s middle-aged adults generally have more time and money, travel more and have more communication privacy due to Internet connections by means of personal cell phones, laptops, tablets and even Internet watches. These devices provide constant ways to connect with strangers for a variety of purposes, from establishing friendships to creating impersonal sexual liaisons, posing a range of new opportunities for behaviors that may be classified as cheating. Hines (2012) cited that little research exists concerning how these middle-aged adults perceive online and offline cheating behaviors, with even less research comparing the attitudes of middle-aged homosexual individuals. Fincham and May (2017) stated, “With legal recognition of same sex marriage research on infidelity in same sex couples is long overdue. Researchers should expand their focus from sexual infidelity in heterosexual relationships to include gay and lesbian relationships” (p. 20).

More recently, Desai et al. (2018) studied fidelity on the Internet. Desai et al. noted that at present, there is little to no consensus on what actually constitutes infidelity in the digital age, but that this has not prevented Internet infidelity from posing a significant problem for mental health. Indeed, the lack of clarity with respect to what constitutes infidelity may actually worsen the effects on mental health by creating the possibility for “accidental” cheating in the sense of one partner doing something he or she does not realize the other would consider infidelity (Desai et al., 2018). In general, this form of infidelity has resulted in the degradation of relationship quality for many couples today.

In the specific context of India, Jain et al. (2018) studied the Internet as a venue for sexual exploration. In their study, over a third of the participants admitted to having participated in what they considered online infidelity at least once (35.2%). The results specifically included a large sample of homosexuals, bisexuals, and heterosexuals. Follow-up qualitative research suggested that there were three primary drivers of online infidelity in this context, which were “psychological distress (depression and frustration), social isolation (lack of emotional support, loneliness, and boredom), and external influence (desire to explore and peer pressure)” (Jain et al., 2018, p. 105). Thus, the antecedents of online infidelity were broad and, more troublingly, everywhere. In this particular study, homosexuals attributed online infidelity much more strongly to psychological distress, whereas heterosexuals attributed it to external pressure and social isolation. This suggested that the drivers of infidelity might differ between sexual orientations as well.

With over 1.5 billion active users, Facebook is one of the primary, perhaps unintentional, facilitators of online infidelity (Cravens & Whiting, 2014). Facebook allows users easy access to both people from their past, such as former romantic partners, and also a broad array of new people with shared interests. Considering the sexual exploration and social isolation aspect of infidelity for heterosexuals noted by Jain et al. (2018), it should come as little surprise that a website which offers such easy and significant access to a broad pool of potential partners represents one of the main facilitators of online infidelity. However, it was less clear whether these sites were as significant a driver of infidelity for homosexuals, especially if these individuals were more likely to cheat online as a result of psychological distress.

Defining Online Infidelity

The new technologies have removed the previous need for individuals to physically seek out and personally negotiate the terms of cheating behaviors (Schneider, Weiss, & Samenow, 2012). By 1990, due to the increasing infiltration of the Internet into every facet of personal and business life, the reduced need for face-to-face interaction removed many of the risks and consequences of cheating behaviors in a conventional committed relationship (Schneider et al., 2012).

Once the Internet began to increase in popularity and access, concepts that constituted as “cheating behaviors” commonly described an individual who spent gradually increasing hours on the Internet watching actual or simulated sexual acts, otherwise known as pornography, engaging in sexually-oriented chat rooms with strangers or exploring virtual fantasy relationships with strangers. The accused

individual, however, could refute their partner's anger with this behavior by arguing that these behaviors did not constitute as actual cheating because they were "not real." In other words, because the sexual act did not occur, it could not be considered cheating, according to the accused partner. Though the accused partner was using the Internet to watch actual or simulated sexual acts, he or she did not physically engage in the sexual act themselves. However, depending on the definition of infidelity that exists between the individuals involved in a relationship, it cannot necessarily be assumed that these virtual behaviors automatically do not constitute as acts of infidelity. Furthermore, web cams and web streaming have since added an illusion of familiarity like the familiarity that some individuals feel toward their favorite film or movie stars, which often bear little resemblance to the actual person. In other words, the Internet provides a platform that can be argued as a "fantasy land," particularly in the scenario of pornography, equipped with actors and actresses in a simulated setting. Because of this notion, pornography can easily be compared to the likes of a standard television show or movie, rather than a cause of infidelity. While pornography is commonplace and acceptable for some couples, for others, it may be an unacceptable behavior that constitutes cheating behavior.

With the proliferation of social networks, partners seeking a form of online or offline sexual activity need only download applications to his or her personal cell phone. These apps can collect basic information about characteristics of the person sought and have the app send messages to the account holder when a potential suitor meets these criteria. Cell phone numbers can be exchanged, and a real or virtual sexual encounter can therefore be established anywhere in the world. These developing technologies further

blur the lines between offline and online activities. Wysocki and Childers (2011) wrote that being homosexual increased participation in sexting (sending and receiving sexually descriptive text messages) and sending erotic or nude photographs via text or email, with slightly higher participation by women (1.5%) than men. Not only has the Internet brought forth pornography and apps that enable people to connect with one another, but it has also introduced websites for the overt purpose of infidelity. Ashley Madison, for example, is an online dating website specifically for married people seeking affairs, both heterosexual and homosexual (Bernstein, 2015). Founded in 2002, the website is commonly known for its former slogan: "Life is short. Have an affair." Advertising for the website had been distributed everywhere, from billboards to magazines to website banners. According to prior reports about the website, approximately one in every six married men in the United States has a personal account on Ashley Madison (Bernstein, 2015). However, it is unknown whether most married men that maintain an account had actually met with or had sexual encounters with someone from the site (Bernstein, 2015). Ashley Madison maintained an app available for download in the iTunes and Android app store, meaning that individuals seeking sexual encounters could do so via the convenience of their smartphone. The plethora of electronic outlets for sexual behaviors has therefore raised many questions about infidelity such as whether physical contact is required for the activity to constitute cheating or is viewing sexual images on a screen more harmful or just as harmful to an intimate partnership as viewing sexually based magazines. Schneider (2012) asked whether these behaviors become acceptable outlets and should therefore not be offensive to intimate partners and whether individuals find

these behaviors by a partner in a committed relationship as hurtful and damaging as a physical sexual encounter (Schneider et al., 2012).

In western culture, with or without marriage, monogamy is generally the crucial goal in committed intimate relationships (Treas & Giesen, 2000, Van Hoot, 2017). Based on a study by Treas and Giesen (2000), 95% of participants desired monogamy, though the very design of monogamy requires both sexual and emotional exclusivity. This requirement may become more difficult to uphold over time, as the challenge for humans (Kinsey, Pomeroy, & Martin, 1948) is the cognitive gap between wanting monogamy and behaving monogamously. Resolution for some individuals may be determined by how the individual or couple defines terms like “sex,” which will then define “cheating.” Reaching conclusions about the meaning of these definitions then allows a clearer definition of “monogamy” for the couple.

Societal change also has a staggering effect on the perspectives of individuals regarding committed relationships. Risman and Schwartz (2002) found that 59% of the population does not perceive oral-genital contact as “sex.” However, 10 years later, Hines (2012) found that 100% of heterosexual males and 97% of heterosexual females found the same activity to not only be acknowledged as “sex,” but as an outright cheating behavior. Risman and Schwartz (2002) found that 19% of the population did not view penile-anal intercourse as “sex,” but Hines (2012), again, found that 10 years later, 100 percent of heterosexual males and 97% of heterosexual females considered this activity as not only “sex,” but as another cheating behavior. According to this research, 10 years ago oral sex and anal sex did not maintain the same standards regarding cheating as they

do today. Clearly, the definitions can shift societally over time, though they can also shift between individual relationship partners.

Issues With Monogamy and Cybercheating

Infidelity is a common relationship concern, regardless of whether a couple is homosexual or heterosexual (Docan-Morgan & Docan, 2007). Different social guidelines define what constitutes infidelity, as stated above, coupled with individual guidelines. Both homosexual and heterosexual couples must determine what defines infidelity for them to be successful in committed relationships. To reach consensus with this definition requires an acknowledgement that a biological, mental, and emotional difference exists between men and women and how the sexes pursue relationships of any sort (Docan-Morgan & Docan, 2017). LaSala (2005), finds men are more likely than women to cognitively separate love from sex (Banfield & McCabe, 2001; Duncombe & Marsden, 1993). When compared with their female counterparts, men are more likely to pursue sex without the desire for emotional attachments (LaSalle, 2005; Townsend 1995), which includes the act of having sex with a stranger (Buss & Schmitt, 1993; LaSala, 2005). men are deemed more likely to seek sexual activity purely for recreational purposes that are absent of any desire for real intimacy (LaSala, 2005; Leigh, 1989). Not every man adheres to these theories, stereotypes and perspectives that follow the male population as whole, including the homosexual male population.

This research about male behavior introduces questions about the behaviors of homosexual males in monogamous relationships. Men in same-sex relationships that agree to maintain the monogamous status may agree to the expectation of sexual

exclusivity. Partners who have sexual encounters outside of their monogamous expectations, in this sense, generally experience less relationship satisfaction than either their monogamous counterparts or men in open, non-monogamous relationships (LaSalle, 2005, 2004, Wagner, Remien, & Carballo-Diequez, 2000). Open, non-monogamous, committed relationships among men generally have boundaries and other expectations established, such as safe sexual practices when engaging in sexual relations outside of the main relationship, in addition to discussing the encounter with the main partner and avoiding emotional involvement in the outside affairs (LaSala, 2005). LaSala (2005) found that when the expectations of the relationship, whether monogamous or open, are broken, painful effects are experienced on behalf of the violated partner, including broken trust and rejection.

Diamond (2004) identified “sexual desire” as the urge or motivation to find sexual objects or sexual activity. Long-standing evidence exists that men experience higher degrees of sexual desire than women (Baumeister, Catanese, & Vohs, 2001; Vohs, Cantanese, & Baumeister, 2004). Gender-based differences may be found to explain the higher level of sexual desire in men, whether in homosexual or heterosexual relationships, and lower levels of sexual drive in women, whether in homosexual or heterosexual relationships. According to Holmberg and Blair (2009), men in same-sex relationships have sex more frequently than women in same-sex relationships. The research cites the heightened emotionality, deep attachment and open communication among many same-sex female couples, and the degree to which this differs from the less emotional emphasis and heightened sexual expression experienced by homosexual men.

Different Rules for Electronic Infidelity

Global communication, both voice and live video, as well as email, blogging, chat rooms and hundreds of websites and mobile applications serve to connect people for any number of purposes they desire. Regardless of how much time an individual physically spends on a computer, it can be extremely challenging to determine with whom they are communicating and how often they are communicating with others, due to the presence of mobile devices. When the Internet is used for extradyadic emotional or sex-related encounters, this innovation commonly fuels an old evolutionary emotion called jealousy.

Jealousy. According to Brengle and Bunk (1991) as cited by Dijkstra et al. (2013) relationship jealousy is described as “a partner’s negative response to real or imagined emotional or sexual involvement with another person.” Jealousy is closely tied to the tenets of SST (Buss, 2018), as it relates to progeny and resources. When the partner discovers the infidelity, whether same-sex or opposite sex, there is typically and understandably a painful reaction with damage to trust and the relationship bond as well as ego damage that another person would be more appealing to his or her partner. Often, discovery leads to separation, whether temporary or permanent (Buss, 2018).

In the United States, one-third of all divorces are related to Internet affairs or cybersex (Dijkstra et al., 2013). Numerous homosexual and heterosexual celebrity couples, with and without children, have endured high-profile divorces as a result of infidelity. One of the most infamous cases of cyber cheating followed the virtual infidelity of a former New York state Congressman. The Congressman, who has been accused and found to have engaged in sexual relations with suitors he met via the Internet

and sent sexually explicit photographs to several girls and women, among other behaviors. His inability to cease his virtual activity ultimately led to the public divorce between him and his former wife. In this case, his actions, coupled with his wife's jealousy and inability to trust her husband due to his actions, led to the demise of the relationship. It is also clear, however, that there was a lack of agreement concerning online, sexual-based behaviors. In this particular circumstance, it is clear that the wife's perspectives of cheating behaviors were not aligned with the husband's and, if it was, he was not behaving according to the expectations of the relationship. However, this is only one case among thousands of similar Internet-based cheating scandals that ultimately led to divorce.

Effective treatments for virtual cheating circumstances are often elusive because insufficient research has explored Internet cheating and associated jealousy (Dijkstra et al., 2013). To assess whether sexual orientation affects the type of emotion and intensity of jealousy created by the discovery of online sexual activities, Dijkstra et al. (2013) found that heterosexual women exhibit the highest levels of betrayal and anger and threat scores, while homosexual men and women identified lower but equal betrayal and anger scores. These results were based on the discovery of romantic Internet contacts or pornography, but not necessarily sexual activity. Involvement of another person produced higher scores than singular or imagined activity. Emotional involvement with another person produced the highest feelings of threat. Offline cheating behaviors produced a higher intensity of jealousy than online activity and both genders of heterosexual individuals rated their jealousy as "more intense" for offline, as opposed to online,

cheating behaviors. Likewise, offline cheating behaviors were rated as “more intense” for offline, as opposed to online, cheating behaviors for both genders of homosexual individuals in the same scenarios. Dijkstra et al. (2013) emphasized the need for further research about Internet infidelity and the types of online behaviors that are considered most threatening to the committed partners’ relationship or marriage. I aimed to contribute to fill the deficit in information.

Attachment. Gerson (2011) described the effects of online infidelity as “a primal rupture in attachment” (p. 148). The damage to the relationship, according to Gerson (2011), is a product of four factors:

1. the suddenness of exposure to the betrayal,
2. where the betrayal occurs (i.e., in the family home or bedroom,
3. how long the betrayal was, how entangled the betrayal is, or how many other people know about the betrayal,
4. how many other times has the betrayal occurred (Gerson, 2011).

The mutual story of the couple, an important part of their attachment, becomes damaged by the betrayal, a damage that can be permanent depending on the individual’s definitions of fidelity and infidelity. Gerson (2011) defined the “couple narrative” as a story that includes accepted concepts of fidelity and adherence to those rules, regardless of how restricted or lax these rules are. These rules then form the basis of security and personal loyalty. Breaking the rules that define fidelity, therefore, can destroy the couple narrative and possibly the attachment of the couple.

The attachment process is multifaceted, involving the gradual building of trust, comfort, and bonding in a relationship. According to Gouveia, Schulz, and Costa (2016), attachment is closely related to authenticity, which is “acting and expressing oneself in ways that are consistent with inwardly experienced values, desires and emotions” (p. 736). Authenticity is relevant in the attachment process because it allows each partner to feel comfortable with expressing their thoughts and feelings openly (Gouveia et al., 2016, p. 736). However, authenticity as it applies directly to romantic relationships is defined as “a relational schema that favors the benefits of mutual and accurate exchanges of real self-experience with one’s intimate partner over the attendant risks of personal discomfort, partner disapproval or relationship instability” (Gouveia et al., 2016, p. 736).

In other words, as a relationship progresses and a bond strengthens between the involved partners, the individuals experience increasing levels of comfort with the other person with a decreasing fear of the person’s detachment from the relationship. When infidelity occurs, whether via online or offline, there is a disturbance to the authenticity of the relationship, which may drastically cause the dynamic of the relationship to change negatively with the potential to end.

Betrayal. Gerson (2011) described betrayal as an event that often cripples one’s basic balance and sense of both attachment and bonding in a relationship. Security results from feeling “bonded,” as described in the previous section about attachment, and couples have a sense of bonding: a most personal attachment. The cultural narrative on coupling has the ultimate attachment promise, the very vows of the marriage ceremony being, “Till death do us part.” However, Gerson (2011) stated that the bonding must

include fidelity rules, no matter how varied they must be described. With fidelity rules in place, enough adherence to these results will decrease the likelihood of feeling of jealousy and, consequentially, betrayal.

The Internet is a tool that works to separate the individual from his or her behavior because the user can be cloaked in anonymity. It allows individuals to assume multiple identities, genders, ages, and appearances. These avatars are not necessarily the person in the bonding agreement, but rather an invention of the person. This can contribute to feelings of excitement from establishing a different imagined life without losing their real attachment. However, when the relationship partner discovers sexually oriented activity that stems outside of the bonding rules, which is usually discovered by accident, the offended partner experiences great difficulty with understanding the painful feelings of betrayal and rejection (Gerson, 2011). This partner may also feel disoriented, because this betrayal does not necessarily fit the classic infidelity discovery, where signs of the extraneous liaison slowly reveal themselves. The offending partner has not physically involved another person, so it is difficult to immediately define the act as cheating.

The presence of betrayal in a relationship can severely affect an individual's ability to trust both their unfaithful partner and potentially other partners in future relationships. There are several thought processes that are tied to this betrayal of trust, including: "I'll never trust that individual again," "I'll never trust 'the larger demographic group this person is a member of'" again (Leo, 2013, p. 59). The betrayed individual may feel victimized and taken advantage of by the other partner (Leo, 2013, p. 59). This may

consequentially result in damage to the betrayed partner's overall self-esteem and confidence in relationships (Leo, 2013, p. 59).

There are many repercussions of betrayal to the betrayed individual, which include an emotional cost. According to Chandra (2013), betrayal sends messages of selfishness to the betrayed partner. The betrayed partner may believe that his or her needs are not important to their partner and that their partner does not care about the relationship (Chandra, 2013). These conclusions can yield feelings of humiliation and lack of trust. According to Chandra (2013), research has shown that when a betrayal is made public, or when more people know about the betrayal, it is associated with more intense emotional pain (Chandra, 2013). Following the discovery of the betrayal, the betrayed partner may experience feelings of anger and hatred, which may result in heated confrontations and increased likelihood of emotional withdrawal (Chandra, 2013). Moreover, as previously stated, the betrayal of trust can significantly affect the betrayed individual's ability to trust both the partner and future partners (Chandra, 2013).

Cyber Activity as Betrayal

Gerson (2011) further listed five reasons why Internet infidelity is so destructive to the relationship. These reasons entail that the suddenness of discovery, which is often done in the shared home, creates a permanent record, is addictive, and lastly, is obsessive (Gerson, 2011). The Internet cheater is enthralled by the illusion that they are always on the mind of the object of their electronic affection, that boundaries, space and time zones are transcended, and that communication is instant (Gerson, 2011). The Internet offers seemingly harmless but stimulating partners who are removed from the daily

complications of life. This allows the individual pursuing cyber relationships to remain in total control throughout the course of said relationship, by determining when, how often and how he or she decides to communicate with their suitor(s). This also physically and emotionally removes the suitor from commonplace issues, such as bills, work, and family situations, that are part of their main relationship.

Whitty (2005) discovered the many offended individuals generally consider cyber cheating to be a real form of betrayal. This betrayal is perceived as an equally serious breach in trust as an offline cheating event, and therefore maintained the same significance as both emotional and sexual cheating (Whitty, 2005). Henline et al. (2007) found that 72% of the participants in a research project knew someone who had an Internet affair. In other words, nearly three out of every four people interviewed had heard of affairs occurring via the Internet within the spectrum of their known social circles as early as 2007. At the time of the Henline et al. study, sex-based sites were limited to Internet chat rooms, as well as the presence of a few dating sites, but nowhere near the proliferation of sexually based sites that exist today (Gudelunas, 2012). Whitty (2005) concluded from her research about online infidelity that ultimately a cyber affair can have as serious and damaging an effect on the committed relationship as an offline affair. In both scenarios, there is full intention of the partner to execute an affair outside of their main relationships, and behaviors that coincide with their decision to do so.

Synopsis of Literature

The shortage of more current sexual research about online social and sexual behaviors and associated attitudes demonstrates the need to periodically measure these

attitudes as cultures and societies change. Many researchers who study homosexual relationship infidelity have leaned toward the assumption of stereotypes, which oftentimes prove inaccurate. Other researchers have devoted similar attention to perceived cheating behaviors and the expected damage to the relationship that is experienced in heterosexual couples. Just as middle-aged individuals probably could not have imagined the electronic gadgetry available today, the breath and scope of devices that will be introduced over the next five years will prove even more astounding, further merging the real with the imagined, and the eternal fascination of sex will remain a part of this story. These new innovations will provide even more avenues by which to communicate with individuals via the Internet, and introduce even more circumstances where infidelity is both easy to establish and kept secret from the betrayed partner. It remains to be determined if marriage among homosexual couples may change existing perspectives about what constitutes cheating, particularly in the virtual world. It also remains to be determined whether the matter of online infidelity and its associated perceptions will change to adapt to transforming and progressing societal norms and perceptions. I hopefully contributed to the existing body of research about the topic and provided statistics at an important moment in time for future researchers to further develop and explore.

Current Treatment Philosophies

Treating psychologists and professors at the University of Seattle, Martell and Prince (2005) distinguished the intricacies of treating problems caused by infidelity in homosexual relationships. Their premise was that non-monogamy in a committed

relationship is not necessarily an “affair” in the grand scheme of the relationship and marriage prototypes of homosexual couples and even some heterosexual couples. The couple’s agreement, whether overly stated or known only by each individual, carries a predetermined understanding of the acceptable reactions to outside sexual activity that may influence the relationship. When couples of any sexual preference form a committed relationship or marriage, the indicators for success or failure are generally similar (Gottman et al., 2003). Understanding first how each partner perceives the concepts of non-monogamy and infidelity are crucial for preparing the couple for success. Non-monogamy that is perceived as recreational and unrelated to the primary relationship in a threatening manner requires both partners who fully understand this notion or does not understand but agrees for personal reasons (Greenan & Tunnell, 2003). This also includes a clear definition of what activities constitute as “cheating behavior” and what does not. When the boundaries of the couple’s established definitions are crossed, then those behaviors may then be classified as infidelity.

Integrative Behavioral Couple Therapy

Integrative behavioral couple therapy (IBCT) derived from the ideas of psychotherapists to fill the knowledge gap about how best to treat homosexual couples experiencing relationship distress (Greenan & Tunnell, 2003). IBCT utilizes traditional behavioral techniques coupled with experiential techniques to improve the relationship outcomes for both homosexual and heterosexual couples. IBCT is used to discover expectations of the individuals and/or of the couples that cause difficulties, and use change theory and acceptance techniques, as well as tolerance, to create an opportunity

for increased intimacy. Unlike traditional therapies, IBCT practitioners do not require that extradyadic activities end because therapy can commence but do require that the activities are disclosed to both partners. Therapy cannot continue unless the secret activities of both partners are disclosed, even if they are not discontinued. The goal of this action is that despite the negative effect of the other partner, disclosure offers the opportunity for each partner to discuss how the activity affects them, and how said activity is understood by each of them. It is anticipated that the offending partner will ultimately decide to end the activity that is causing angst, and the practitioner may then help the couple to collectively decide how to bring about resolution together.

IBCT seeks to place the activity in the landscape of the couple's entire relationship and what, if any, circumstances may help foster the activity. Perhaps the offending spouse of the activity needs more attention from a spouse who was overcommitted to work and other tasks. Perhaps the offending spouse wished to experience more passion or variety in their sexual lives. By addressing the underlying issues, the behavior is not excused, but shortcomings about the core of the relationship can be addressed. Following the conclusions of Jacobson and Christensen (1996), all behavior will ultimately make sense, including the unacceptable behaviors. Establishing an understanding of the behavior can lead to change and, hopefully, increased intimacy by all definitions in the relationship.

Differences in Communication and Personality Style

An affair need not include sex to damage a relationship (Martell & Prince, 2005). Behavioral patterns according to differences in communication and personality can

ultimately damage a committed relationship and/or marriage. If one partner is outgoing and demanding to a partner who equates this behavior with “nagging,” for example, and the receiving partner has learned to “withdraw,” this combination of behaviors ensures that, over time, neither partner is happy with the relationship. Typically, the more outgoing partner will find a friend with whom they may or may not become intimate but have a more expressive relationship. The withdrawn partner will often feel that the new friendship is a violation of the primary relationship leading to the further degrading of the quality of the relationship (Martell & Prince, 2005). The IBCT practitioner can utilize the same methods to uncover the hidden beliefs about the behavior of both partners and the definitions each attaches to the other partner’s behavior. Understanding by each partner of the effect of the behavior and responses can lead to realization of why one partner turns to the emotional friendship that ultimately caused the problem. Further techniques can help each partner make changes to some behaviors, such as including both partners in the new friendship, as well as more intimacy and knowledge in the primary relationship. The goal of this study is, again, to add updated information to the scarce existing research about the changing values and perceptions of same-sex couples regarding online behavior in particular, and how online behaviors may or may not be perceived as infidelity.

Research Approaches

Prior studies have examined infidelity from various angles. For example, Frederick and Fales (2016) utilized a purely quantitative design to study the differences between heterosexuals and homosexuals in traditional cheating. This approach had the strength of being able to clearly define the results in terms of how much different kinds of

infidelity affected people of different gender-sexuality combinations. However, this purely quantitative approach did rely on SST and existing research to explain the reasons behind its results, as a purely quantitative study cannot examine reasons. Conversely, a mixed methods approach such as that used by Jain et al. (2018) allows for results that show both quantitative percentage and explanatory qualitative themes. Such a result offers great exploratory and explanatory power. It also requires a significant investment of resources into collecting qualitative data from enough of the participants. This makes such research difficult to carry out from a practical standpoint. Cravens and Whiting (2014) adopted qualitative, exploratory approaches in seeking to determine the nature of a phenomenon, such as why and how Facebook plays a role in infidelity. These qualitative results offer a good explanation of the phenomena and are very complete because of their exploratory nature, but they also lack empirical power or the ability to determine how widely their conclusions may be generalized.

Summary

Many diverse coupling rules have been defined by numerous cultural groups since the earliest humans first formed tribal societies. Darwinism's "survival of the fittest," reinforced the idea because reproduction is essential to the survival of a species it follows that the most desirable potential mates possessed certain traits. The most desirable women are fertile, while the most desirable men are both providers and protectors. The theoretical framework of SST supported that these evolution-based factors continued to influence mate selection, in addition to various cognitive traits, such as personality, determination, and vocational drive.

Regardless of the underlying factors that drive mate selection, whether primitive or cognitive in nature, relationships entail spoken or understood guidelines concerning infidelity. Research cited the need for a foundation of trust in relationship is essential for relationship success. That foundation includes complex bonding rules in many areas of life including fidelity. Whether a relationship is monogamous or non-monogamous in nature, involved partners must still agree to a definition of what constitutes infidelity and its associated behaviors. These definitions may exist for involved individuals, but the rules must remain fluid in society, as changing social and technological progressions influence the perception of infidelity in relationships.

As the Internet became available almost everywhere, individuals could communicate anywhere, with anyone, at any time, by means of a computer, a tablet, a smart phone and even accessories, like smart watches. This means that individuals are exposed to more avenues to connect with like-minded individuals based on friendship, business, interests, and even sex. This also means that new definitions must be established to define the behaviors that are deemed acceptable and unacceptable in the virtual world, and what constitutes infidelity. While couples have patterns of marriage or committed relationship to reflect on for guidance, merely duplicating these traditional behavioral patterns may no longer fit due to the technological and social advancements.

Prior research has focused a great deal of attention on younger, heterosexual individuals' relationships and sexual practices; however, it has focused little on these factors as they pertain to homosexual individuals. Less research has focused on homosexual relationships and associated behavioral guidelines that define infidelity, and

scarce research exists concerning the behaviors and perceptions about homosexual relationships as they relate to online infidelity. This study hoped to offer additional insight about the latter topic and contribute to the existing body of research. I offered information about establishing behavioral boundaries in intimate relationships concerning online activities, to prevent the social and emotional damage that follow infidelity. To avoid matters of infidelity, the most essential notion was to create a basis of understanding that included defining acceptable and unacceptable behaviors as they related to online and offline, and what defined fidelity and infidelity to the involved individuals. I offered more information about whether differences in perceptions between those seeking homosexual and heterosexual relationships differed significantly regarding what constitutes infidelity via the Internet. Chapter 3, therefore, delineates the study's quantitative research approach. Drawing on this research method allowed me to characterize the difference in perceptions between persons of different gender-sexuality combinations.

Chapter 3: Methodology

Purpose of this Study

The purpose of this quantitative, quasi-experimental study was to investigate and determine if there were significant age, gender, and/or sexual orientation differences in perceptions of online sexual activities that might be interpreted as relationship cheating. This study provided an analysis of the evolving attitudes toward sexual mores and societal memes at a time when Internet use was on the rise and rights of same sex individuals were afforded the same right, privileges, and obligations of heterosexual couples. An understanding of how specific online behaviors were perceived could help couples come to better understanding of which online behaviors were a threat to their relationships.

I collected data for this research study using a survey to examine the attitudes toward what constitutes online sex-related cheating behaviors of adults who were or who have been in a committed relationship, as defined by either living with a partner (either same-sex or opposites-sex) or who were or had been married to a same-sex or opposite-sex partner. For the purposes of this study, it did not matter whether the participants have engaged in cheating behaviors. Participants ranged in age from 21-45 (emerging adults 21-29 and adults 30-45).

Preview of this Chapter

In Chapter 3 I discussed the research design and the rationale for the method, information about the sample, the instrument used for data collection, how the data are collected, and how participants are informed of their rights. I discussed the rationale for

the method chosen and why the method is appropriate for the study in the research design section. In the sample collection section, I discussed the way data were collected, the desired sample characteristics, and the size of the sample. In the instrumentation section, I presented the instrument chosen for data collection and how the data addressed the variables in this study. The data analysis section, I detail the hypotheses, the tests used, validations, and how they were used to support or deny a hypothesis in the study. I discussed Participants' rights and safeguards in the last section.

Research Design and Rationale

I used a quantitative, quasi-experimental research design to investigate and determine if there were significant age, gender, and/or sexual orientation differences in perceptions of online sexual activities that may be interpreted as relationship cheating. This research design was appropriate for the study because I examined potential differences between identified variables without manipulating the independent variables of age, gender, and sexual orientation to which participants could not be randomly assigned (see Babbie, 2013). The independent variables in the research questions were age (two levels, emerging adult and adult), gender (two levels, male and female), and sexual orientation (two levels, heterosexual and homosexual). Dependent variables were the severity rating based on ratings of whether an activity was considered relationship cheating by each participant. There were three subscales (sexual infidelity, emotional infidelity, and pornography use) and an overall score. There were four related dependent variables. Hines (2012), Lecker and Carlozzi (2014), and Ucar et al. (2016) examined data on the ratings of similar dependent ratings by heterosexual males and females, and I

explored whether a difference existed with the stated opinions of same-sex individuals and opposite-sex individuals.

Methodology

Population

The target population for this study was individuals 21-45 years old who were married, had been married or in a committed relationship within the United States. They did not need to currently be in a marriage or other committed relationship at the time of the survey but should have been at some prior time. Experience in some type of infidelity was not a requirement to participate. I needed a study sample of at least 150 responses and chose an online survey method for the anonymity of the participant while replying to sensitive, personal questions. I hoped that this anonymity led to frank responses, especially given the sensitive nature of the subject matter.

Sampling and Sampling Procedures

Sampling strategy and justification. The study group included 21- to 45-year-old men or women in a married or committed relationship or who had a history of either type of relationship and were currently residing in the United States regardless of country of origin. I used a convenience-based self-selection sampling technique to gather prospective participants for the study. Such sampling was likely the only feasible approach to sampling given the study's broad focus and was typical in exploratory, quantitative research. This study represented the first attempt to compare same-sex and heterosexual relationships in this particular context. It would be considerably more

difficult to seek out participants with relevant characteristics as opposed to allowing participants to self-select.

Sampling frame. The sampling frame was all adults who responded anonymously to a public social media ad. I did not have any knowledge of the participants or their individual responses. This choice of sampling frame allowed total privacy for participants and ensured that all participants in the study had at least some experience with the Internet and social connectivity. Excluded categories would be individuals with no online experience and/or no committed relationship experience as well as individuals outside of the age range.

Sampling procedure. Sampling began after I received an approval number from Walden University's IRB number (10-29-18-0041573 which expired on October 28, 2019). I carried out recruitment through social media websites such as Facebook. I posted several recruitment advertisements which contained a brief background of the study, the purpose, and the role of participants in the study. Respondents were encouraged share the advertisement. Those interested in participating were directed to the SurveyMonkey page containing the survey, where the automated form determined their eligibility and continue to the survey if they met the inclusion criteria. When the collection site notified me that we had 150 responses, data collection ceased.

Power analysis. Based on the power analyses conducted using G*Power v3.1.0, at least 128 participants were necessary for the study. The priori sample size calculation considered several factors for the calculation. First, the power of the analysis considered is based on a standard of 80% (Leedy & Ormrod, 2013). Second, I considered a medium

effect size to ensure that the analyses are not too lenient, nor too strict in identifying potential relationships. Third, I considered a significance level of .05. I conducted a three-way Manova (age, gender, and sexual orientation) to analyze the data gathered in the study. I determined that at least 128 participants were necessary for the study.

Procedures for Recruitment, Participation, and Data Collection

I obtained approval from Walden University's Institutional Review Board to collect data while ensuring that the rights of participants were protected throughout the study. After obtaining approval, I posted a recruitment advertisement on my social media account. The recruitment advertisement contained a brief background of the study, the purpose, and the role of participants in the study. People were encouraged to share the recruitment advertisement for a wider range of potential participants to engage in a snowballing recruitment process. A link to access the survey in Survey Monkey was provided in the solicitation ad. Before being directed to the survey instrument, prospective participants answered a list of screening questions.

I required that participants met were between the ages of 21-45 and were married or in a committed relationship or had been in the past. Participants were required complete 75 percent of the questions or the response would be discarded. As I discussed in the delimitations section of Chapter 1, the choice of age range was to ensure relevance of experiences. They were placed into one of two groups: emerging adults (ages 21-29) and adults (ages 30-45). The informed consent form was presented to qualified participants and non-qualified participants were thanked for their time.

All information regarding the procedures and risks of participation in the study was contained in the informed consent documents well as confidentiality and anonymity remarks. I used a statement on the website to advise participants that they could skip any question they found troubling and could stop the survey at any time. I used a downloadable debriefing document at the end of the survey to provide a way to contact me but anticipated no need for interviews or treatments of any kind.

Instrumentation and Operationalization of Variables

Docan-Morgan Internet Infidelity Questionnaire. I selected the Docan-Morgan Internet Fidelity Questionnaire (DMIQ; Docan-Morgan & Docan, 2007) primarily so that results could be effectively compared to previous studies using the instrument to determine attitudes of middle-aged individuals who prefer mixed sex relationships toward Internet cheating behaviors (Docan-Morgan & Docan, 2007). Dr. Tony Docan-Morgan gave permission to use this instrument via an email in the appendix. This study was intended to identify the attitudes toward Internet cheating behaviors in a similar set of individuals who preferred same sex relationships. The DMIIQ was a survey tool with 44 questions that could be sorting into three categories: sexual infidelity, emotional infidelity, and pornography use (Docan-Morgan & Docan, 2007). Based on their individual values, participants were presented with scenarios that they might not have actually experienced. Participants were to answer as though they discovered their spouse or partner doing the action and whether they felt it would be a breach of infidelity. Scenarios ranged from trivial to severe.

Docan-Morgan and Docan (2007) created the DMIIQ to accurately measure attitudes toward online and in-person sexual cheating behaviors of individuals who consider themselves to be heterosexual. They divided the behaviors in question into three categories, namely, emotional, sexual and pornography behaviors. Previous survey instruments did not measure aspects that Docan-Morgan and Docan (2007) wanted to study. To verify that the data were factorable, Docan-Morgan and Docan used two tests. The Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy. Values of at least 0.6 are necessary and the DMIIQ measure of 0.943 identified the instrument as acceptable sampling adequacy. The Bartlett's test of sphericity also indicated that the data set effectively measured the intended targets for the factor model ($\chi^2 = 7,050.12, p = .000$; Tabachnick & Fidell, 2001). Furthermore, three factors on the DMIIQ could explain 65% of the total variance, and validation of the instrument yielded an overall Cronbach's alpha of 0.91, indicating high validity and correlation. A copy of the survey questionnaire can be found in Appendix A. Permission to use the instrument can be found in Appendix A. This instrument has been successfully used in prior doctoral research, such as the study by Hines (2012), which compared online and offline cheating in middle-aged adults.

Demographic data. The instrument used to collect demographic data can be found in Appendix B. This instrument was designed by me; however, the nature of demographic information was direct and straightforward enough as to not require testing and validation. Docan-Morgan and Docan (2007) created the DMIIQ to accurately measure attitudes toward online and in-person sexual cheating behaviors of individuals who consider themselves to be heterosexual. They divided the behaviors in question into

three categories, namely, emotional, sexual and pornography behaviors. Previous survey instruments did not measure aspects that Docan-Morgan and Docan (2007) wanted to study. To verify that the data were factorable, Docan-Morgan and Docan used two tests. The Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy. Values of at least 0.6 are necessary and the DMIIQ measure of 0.943 identified the instrument as acceptable sampling adequacy. The Bartlett's test of sphericity also indicated that the data set effectively measured the intended targets for the factor model ($\chi^2 = 7,050.12, p = .000$; Tabachnick & Fidell, 2001). Furthermore, three factors on the DMIIQ could explain 65% of the total variance, and validation of the instrument yielded an overall Cronbach's alpha of 0.91, indicating high validity and correlation. A copy of the survey questionnaire can be found in Appendix A. Permission to use the instrument can be found in Appendix D.

Data Analytic Plan

Data analysis consisted of two stages: descriptive statistics and hypothesis testing. I used SPSS statistical analysis software for all data analysis I summarized demographic information submitted by participants by calculations of the descriptive statistics. I used frequencies and percentages to present the descriptive statistics of demographic variables across both dependent and independent variables, along with overall tabulation of the demographics that the study participants represented. These descriptive statistics served to characterize the study's participants and the breadth and depth of the responses that were received. This would serve to contextualize the study results both within the study itself and for the purpose of future scholars or other parties seeking to apply the results. At this point, the data were also checked for outliers; if these outliers were explained in

reasonable terms, they were excluded from the dataset. Incomplete survey responses were excluded from the sample where appropriate.

In the second stage of analysis, I sought to answer the research questions by testing their hypotheses. I addressed all the research questions by conducting a three-way Manova for age, gender, and sexual orientation. Four DMIQ scores served as the dependent variables. These included sexual infidelity, emotional infidelity, pornography use, and an overall score. I used significance level of $p = 0.05$ for all analyses. I did not use covariates at this time, as the primary predictors of interest were demographic. Since the hypotheses referred to the presence or absence of a difference in means between different populations, Manova testing allowed for the rejection of the null hypotheses for each research question if statistically significant difference in variance results from such testing. If there were no statistically significant differences, it was impossible to reject the null hypotheses, although this constituted a lack of evidence for the alternative hypothesis rather than explicitly evidence of a lack.

Research Questions

Research Question 1 (RQ1) – Age: Among individuals who are in committed relationships, are there differences between younger and older individuals' perceptions of online cheating?

Null Hypothesis (H_0): There is no significant difference between age groups in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity

Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Alternative Hypothesis 1 (H_{a1}): There is a significant difference between age groups in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity

Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Research Question 2 (RQ2) – Gender: Among individuals who are in committed relationships, are there differences between males and females’ perceptions of online cheating?

Null Hypothesis (H_02): There is no significant difference between gender in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Hypothesis 2 (H_02): There is no significant difference between gender in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Alternate Hypothesis (H_{a2}): There is a significant difference between gender in terms of perceptions on specific behaviors that may be interpreted as online

sexual cheating as defined by the Docan-Morgan Internet Infidelity

Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Research question 3 (RQ3) – Sexual Orientation: Among individuals who are in committed relationships, are there differences between heterosexual and homosexual individuals' perceptions of online cheating?

Null Hypothesis (H_03): There is no significant difference between sexual orientation in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity

Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Hypothesis 3 (H_03): There is no significant difference between sexual orientation in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity

Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Alternate Hypothesis 3 (H_a3): There is a significant difference in sexual orientation in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity

Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Threats to Validity

External Validity

I defined external validity as the degree to which the results of the study were valid relevant to a broader, more general context. In quantitative research, external validity was most strongly expressed in terms of power analysis and statistical significance. The preceding section addressed the degree to which the study's power analysis assured the validity of the results. Unfortunately, power analysis alone did not guarantee generalizability in and of itself, and instead it must be taken together with actual study population data. A careful use of descriptive statistics served to characterize the population to ensure that any future researcher or other party seeking to generalize the results or apply them in a specific context could easily determine the circumstances under which they were uncovered.

Because the survey was self-selected by anonymous participants, I hoped to secure a fair mix of men and women, but this factor was also outside of my control. I could have continued to collect responses until the numbers could have been leveled by discarding excess responses, but I wanted to maintain the randomness of responses. The same held true for a balance of sexual orientations. If one gender or sexual orientation proved unable to reach the valid sample size, I considered amending the hypotheses to use independent sample *t*-tests, which could be calibrated so that a larger sample on one side balances out a smaller sample on the other. Due to the sampling technique, some degree of concern over participant self-selection bias was hard to entirely rule out. However, I had no reason to think any particular group would be more attracted to

participation. If the results showed a strong trend toward certain answers in the data analysis, then I would have reevaluated the potential risk posed by self-selection bias during the analysis.

Internal Validity

Internal validity referred to the question of how well the study results represent what they were intended to represent. Internal validity was bound up in the alignment of study components. I chose the research questions that guided the study to serve the purpose of the study and chose the research methodology to answer those research questions. To answer the research questions, careful choices of research design and methodology were made. Each research question corresponded to specific null and alternative hypotheses, and by choosing appropriate measures for the variables expressed in these hypotheses and appropriate hypothesis testing, methodological internal validity was assured. This chapter represents an in-depth documentary of the methodological choices so that a future researcher might look at it and see how alignment was maintained.

Not all threats to internal validity came from within the study design itself. Threats to internal validity also included misrepresentation of age, gender, or sexual orientation by respondents. Validity of results depended heavily on accurate expression of opinion, which was a product of personal experience, attitudes passed on in the home of origin, and other factors. How the respondent expresses his or her viewpoint was outside of my control. By choosing an existing, validated instrument to measure these variables, I sought to address and limit this threat to internal validity as much as was

possible. Researcher bias was not expected to represent a significant threat to validity because, to some extent, the data and results spoke for themselves. Because the results of a statistical analysis were presented, readers could interpret the analysis results for themselves. Nonetheless, I took great care to remain impartial. Another potential concern was participant bias, self-report bias or social desirability bias. Social desirability bias, meaning presenting answers that the participant feels are socially acceptable, was an unavoidable risk without the inclusion of a social desirability scale. The anonymous nature of the data collection should minimize the risks of these biases.

Ethical Procedures

Participants' rights, obligations were described in the informed consent form (Appendix C), an acknowledgement requirement for participation. The participant's willingness to continue was witnessed by the participants' acknowledgement. Participants were advised that raw data were aggregated with no sensitive personally identifying information to me. Raw data, including all notes and copies, would be secured and maintained for at least two years. All data will be kept in a password-protected computer only accessible by me. All forms of data will be completely destroyed three years after the completion of the study through shredding and permanent deletion from the hard drive of the researcher. I expected no significant risk to the participants because of the quantitative, anonymous nature of the study. The subject matter for the study was somewhat sensitive, but participants were advised of its nature during the informed consent process (first page of the survey). Those for whom the subject would be

problematic could withdraw from the study after reading the information presented in the informed consent documentation.

I chose an online survey method to collect data with the hope that this method provided more anonymity than face-to-face interviews where persons might be disinclined to answer certain questions or might be too uncomfortable to be truthful. Truthfulness is always a risk, whether anonymous online questionnaires or in-person interviews. It was hoped that anonymity provided the best opportunity to collect accurate data. All participants acknowledged informed consent that described the scope of the study, the participation parameters, as well as the responsibilities of the participants and of the researcher. Participants were given a method to contact the researcher should they require more information about the study and how to request a summary of the completed study. Participants could stop the survey at any time and might decline to answer any questions. All electronic unprocessed data would be securely maintained for a period of three years. No data were identified by name or other identifiable numbers, and no ISP or computer location information were collected.

Summary

Chapter 3 includes the research design and the setting and method of data acquisition. The methodology for the study was quantitative, seeking to test hypotheses that correspond to three research questions. The specific research design was that of a quasi-experimental study. I used the DMIIQ (Docan-Morgan & Docan, 2007) to collect electronic responses tabulated and processed in SPSS. I protected identity and individual responses of participants, as well as their rights, privacy, and security of the data. I

provided participants with a method to contact me should questions arise, and they could request a copy of the summary of conclusions should they so desire. Chapter 4 contains the results of the data analyses, and Chapter 5 includes interpretation of the data, opportunities for social change, and ideas for further study.

Chapter 4: Results

Introduction

Understanding how perceptions of online relationship infidelity vary by individual demographic characteristics may lead to more effective tools to assist couples in distress due to online I examined perceptions of online cheating among individuals of various ages, genders, and sexual preferences who are in committed relationships, in order to examine whether notions of Internet infidelity differ between these groups. In this study, I used the SST to examine motivations for the establishment of committed relationship based on evolutionary theory. I examined these research questions and hypotheses:

Research Question 1 (RQ1) – Age: Among individuals who are in committed relationships, are there differences between younger and older individuals' perceptions of online cheating?

Null Hypothesis (H_0 1): There is no significant difference between age groups in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Alternative Hypothesis 1 (H_a 1): There is a significant difference between age groups in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity

Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Research Question 2 (RQ2) – Gender: Among individuals who are in committed relationships, are there differences between males and females’ perceptions of online cheating?

Null Hypothesis (H_02): There is no significant difference between gender in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Hypothesis 2 (H_02): There is no significant difference between gender in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Alternate Hypothesis (H_a2): There is a significant difference between gender in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Research question 3 (RQ3) – Sexual Orientation: Among individuals who are in committed relationships, are there differences between heterosexual and homosexual individuals' perceptions of online cheating?

Null Hypothesis (H_03): There is no significant difference between sexual orientation in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Hypothesis 3 (H_03): There is no significant difference between sexual orientation in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

Alternate Hypothesis 3 (H_a3): There is a significant difference in sexual orientation in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.

I began this chapter with a review of the recruitment and data collection methods that took place, including a comparison with the proposed methods, highlighting any discrepancies between the planned and actual methods. Baseline demographic characteristics for the sample were described, as well as the representativeness of the

sample to the larger population. Next, subgroup differences were examined to determine whether any variables should have been included as covariates in the main study analyses. Statistical assumptions were assessed and then the main study analyses were described with the associated findings. The chapter concluded with a summary of the findings in relation to the research questions and hypotheses.

Data Collection

Recruitment and Data Collection

This study relied on a quantitative, non-experimental, causal-comparative research design and attempted to assess attitudes of persons aged 21-45 who prefer or are in same sex relationships. Therefore, the target population was individuals 21-45 years old who are or who have been in committed or married relationships and lived within the United States. The target sample was at least 150 participants. Recruitment efforts involved utilizing social media websites to solicit voluntary participants and snowball sampling, where participants were encouraged to recruit their friends and acquaintances. Data were collected from 150 participants but two completed less than 75% of the questions, a disqualifying factor, leaving 148 participants, which is slightly less than the target, but still within the range determined to be large enough to have the power to detect significant effects accurately.

Sample Characteristics

Demographic information for the sample of participants in the study are presented in Table 1. Most participants answered all of the demographic questions, although some participants did opt out of specific questions. Specifically, each demographic question

included missing data for between nine and 12 participants. No patterns of missing data were identified; therefore, it is unlikely that any questions were deemed too difficult to answer for any of the participants. No effort was made to limit, or recruit based on the variable of age, gender or orientation. The samples were not stratified by gender, race, or sexual preference. Women are somewhat overrepresented. As the table below indicates, the majority of respondents identified as women, Caucasian, and heterosexual, and generalizations of the results of this study should be limited to this population.

Table 1

Sample Demographic Characteristics (N = 148)

Categories	N	%
Age		
20-30 years old	39	28.7%
31-39 years old	37	27.2%
40-45 years old	60	44.1%
Gender		
Female	100	70.9%
Male	38	27.0%
Other	3	2.1%
Ethnicity		
White	111	79.3%
Hispanic/Latino	17	12.1%
African American	6	4.3%
Other	6	4.3%
Relationship Status		
Married	73	52.5%
Divorced	21	15.1%
Committed	21	15.1%
Never married	24	17.3%
Years Married		
Less than 1 year	15	12.2%
1-5 years	42	34.1%
6-9 years	20	16.3%
10-15 years	23	18.7%

(continued)

Categories	<i>N</i>	%
16-20 years	0	0.0%
21-25 years	14	11.4%
26-35 years	7	5.7%
35-50 years	2	1.6%
Years in Relationship		
Less than 1 year	5	3.6%
1-5 years	36	26.1%
6-9 years	30	21.7%
10-15 years	27	19.6%
16-20 years	13	9.4%
21-25 years	12	8.7%
26-35 years	12	8.7%
35-50 years	2	1.4%
50+ years	1	0.7%
Number of Divorces		
0 divorces	81	59.6%
1 divorce	39	28.7%
2 divorces	9	6.6%
3 divorces	6	4.1%
4 divorces	1	0.7%
Number of Children		
0 children	36	26.1%
1 child	30	21.7%
2 children	40	29.0%
3 children	20	14.5%
4 children	8	5.8%
5 children	2	1.4%
6 children	1	0.7%
7+ children	1	0.7%
Sexual Preference		
Heterosexual	125	91.2%
Bisexual	5	3.6%
Same sex	7	5.1%
Education		
Less than HS	5	3.6%
HS graduate	27	19.7%
Tech graduate	11	8.0%
2-year degree	23	15.5%
Some college	30	21.9%
Bachelor's degree	22	16.1%
Any grad study	19	13.9
Income		(continued)

Categories	<i>N</i>	%
Less than \$30k	15	10.9%
\$31-\$60k	43	31.4%
\$61-\$99k	36	26.3%
\$100k or more	43	31.4%
Religion		
None	30	21.9%
Catholic	17	12.4%
Non-Catholic Christian	77	56.2%
Other	13	9.5%
Internet Use (weekly)		
1 hour or less	3	2.2%
2-3 hours	10	7.3%
4-5 hours	21	15.3%
6-8 hours	28	20.4%
9-10 hours	11	8.0%
More than 10 hours	64	46.7%

A scale score was computed for all 44 items on the measure of perceptions of behaviors that may or may not constitute infidelity for 132 of the 148 study participants who completed the entire survey. Because all items on this measure were scored either 0 *no, behavior does not constitute infidelity* or 1 *yes, behavior constitutes infidelity*, possible scores on the total scale score for the measure ranged between 0, for those participants who felt that none of the behaviors on the measure constitute infidelity, to 44, for those participants who felt that every behavior on the measure constitutes infidelity. The emotional infidelity and sexual infidelity subscales were also computed by summing the 0 or 1 scores on a subset of items (nine items for emotional fidelity and twelve items for sexual fidelity).

Descriptive statistics for this total scale score and subscale scores were calculated and are shown in Table 2. Participants' total scale scores utilized the full range of the

scale, with eight participants (6.1%) obtaining a score of 0 and nine participants (6.8%) obtaining a score of 44, with a mode of 44. The mode represents that value that was obtained by the largest number of respondents; therefore, all other possible scores were obtained for less than nine participants in the sample. The median value was 26.00, which falls approximately in the middle of the scale and is close to the mean value of 25.13. When a sample is normally distributed on a measure, the mean and median will be approximately the same value and the skewness and kurtosis values will be range between -3 and 3. In this study, these values were well within range, indicated that the assumption of normality was met. Similarly, the full range of scores were utilized for the emotional infidelity and sexual infidelity subscales, the mean and median scores were relatively similar, and the skewness and kurtosis values indicated that these subscales were also approximately normally distributed.

Table 2

Descriptive Statistic for the Docan-Morgan Internet Infidelity Questionnaire

Statistic	Total Scale	Emotional Cheating	Sexual Cheating
Mean	25.13	5.92	7.09
Median	26.00	7.00	7.50
Mode	44.00	7.00	12.00
Std. Deviation	13.71	2.83	3.99
Skewness	-0.35	-0.90	-0.45
Kurtosis	-1.03	-0.33	-1.04
Range	0.00 – 44.00	0.00 – 9.00	0.00 – 12.00

Statistical Assumptions

Before proceeding with the preliminary and main study analyses, it was important to test that specific assumptions hold true with the dataset that is being utilized. For data

to be appropriate for use in analysis of variance (Anova), it is essential that the assumptions of linearity, heteroscedasticity, and normality are met. In addition, if outliers are identified in the data, transformations of these outliers may be essential for accurately understanding the relations between variables.

Scatterplots of the residuals constructed for the study variables revealed that the assumption of linearity was met, since the residuals corresponded to the horizontal line where $y = 0.0$. The assumption of normality was also met, since all skewness and kurtosis scores were within the range of -2 to +2 (Tabachnick & Fidell, 2001). The normal probability plots (i.e., q-q plots) for the measure scores yielded straight diagonal lines, with slopes that roughly equaled 1. In terms of homoscedasticity, when the residuals were plotted against the predictor variables, the data were evenly clustered about the line where $y = 0$, indicating that this assumption was met (Cohen, 2003).

To identify outliers, leverage, shifts in the regression coefficients, discrepancy, and influential cases in the model were calculated. No cases exceeded the criterion for centered leverage ($3k/n = 0.064$; Cohen, 2003), which indicates whether a given data point exerts undue influence on the model. No cases were identified that exceeded the Dfbeta criterion of ± 1.0 , suggesting no changes in the relative influence of the predictor variables because of omitting cases. Influential cases assessed using Cook's Distance showed that no cases exceeded values greater than the criterion of 1.0 (Tabachnick & Fidell, 2006).

Univariate Analyses

Before conducting the main analyses, I used independent samples *t*-tests and an Anova bivariate comparison analyses to examine whether any scores on the study measures significantly differed by the participant demographic characteristics that are shown in Table 1. Independent samples *t*-tests are utilized when comparing score differences between two groups and Anova is utilized when comparing score differences between more than two groups. For many of these demographic characteristics, the groups were condensed given the small number of participants in each. For example, in response to the question about sexual preference, only five participants identified as bisexual and only seven identified as homosexual. These two groups were combined. Other variables that were condensed into two groups included years married, years in a relationship, has children, number of divorces, years of education, and income.

Results from these analyses are presented in Table 3. As shown, there were significant group differences by gender and religion, but not by any of the other demographic characteristics. Note that there are unequal numbers of participants in each group. While this does not invalidate the findings, the interpretation and generalization of all results should take this into consideration. Women's scores were significantly higher on the total scale score and on each of the subscale scores than men (see mean comparisons in Table 4). Participants who identified as not religious had scores that were significantly lower than participants who identified as Catholic, another Christian denomination, or who selected other as their religious identification (see mean

comparisons in Table 5). Because these demographic differences were identified, the main study analyses controlled for gender and religion to account for them.

Table 3

Univariate Analyses to Identify Subgroup Differences

Categories	Overall Infidelity		Emotional Infidelity		Sexual Infidelity	
	<i>t</i> or <i>F</i>	<i>p</i>	<i>t</i> or <i>F</i>	<i>p</i>	<i>t</i> or <i>F</i>	<i>p</i>
Age group	0.67	.52	0.48	.62	0.57	.57
Gender	2.33	.02	2.23	.03	2.00	.04
Ethnicity	0.13	.90	0.69	.49	0.66	.51
Relationship Status	0.53	.67	0.14	.93	0.22	.89
Years Married	0.05	.96	0.20	.84	0.61	.54
Years in Relationship	0.07	.95	0.29	.78	0.58	.56
Ever Divorced	0.14	.89	0.72	.48	0.28	.78
Has Children	1.21	.23	0.33	.74	0.60	.55
Years of Education	0.23	.82	0.49	.63	0.30	.76
Income	0.34	.73	0.27	.79	0.30	.76
Sexual Preference	0.63	.53	0.75	.46	0.23	.82
Religion	5.38	< .01	6.73	< .001	4.44	< .01
Internet Use Weekly	1.28	.28	1.16	.33	0.84	.52

Table 4

Mean Comparisons by Gender

Gender	Overall Infidelity	Emotional Infidelity	Sexual Infidelity
Female	26.80	6.25	7.48
Male	20.70	5.05	5.95

Table 5

Mean Comparisons by Religion

	Overall Infidelity	Emotional Infidelity	Sexual Infidelity
Catholic	27.82	6.13	7.69
Non-Catholic Christian	27.88	6.61	7.88
Other	25.08	6.00	6.85
None	16.66	4.00	4.86

Results

The Effect of Age

Table 6

The Effect of Age on Perceptions of Behaviors of Infidelity

Categories	Type III Sum of Squares	df	Mean Square	F	p
Intercept	3260.933	1	3260.933	18.088	.000
Gender	412.128	1	412.128	2.286	.133
Religion	1598.871	1	1598.871	8.869	.004
Age Group	254.790	2	127.395	.707	.495

I repeated this same analysis twice but replaced the dependent variable with the two subscales (emotional infidelity and sexual infidelity). The results of these analyses are shown in Table 7 and indicate that, again, age was not significantly associated with either perceptions of emotional or sexual infidelity when controlling for gender and religion.

Table 7

The Effect of Age on Perceptions of Behaviors of Emotional and Sexual Infidelity

	Type III Sum of Squares	df	Mean Square	F	p
Emotional Cheating					
Intercept	164.735	1	164.735	22.036	.000
Gender	20.430	1	20.430	2.733	.101
Religion	100.274	1	100.274	13.413	.000
Age	11.281	2	5.641	.755	.472
Sexual Cheating					
Intercept	230.621	1	230.621	14.950	.000
Gender	12.240	1	12.240	.793	.375
Religion	114.425	1	114.425	7.417	.007
Age	28.657	2	14.328	.929	.398

The Effect of Gender

To examine the effect of gender when accounting for religion as a covariate, I conducted another series of Ancova. The first considered the overall scale, the second considered perceptions of behaviors of online emotional infidelity, and the third considered perceptions of behaviors of online sexual infidelity. The total scale score on the Docan-Morgan Internet Infidelity Questionnaire was entered as the dependent variable, gender was entered as the independent variable, and religion was entered as a covariate. The results are shown in Table 8 and indicate that, when controlling for religion, gender is no longer significantly associated with the total scale score for perceptions of behaviors that represent online infidelity.

Table 8

The Effect of Gender on Perceptions of Behaviors of Infidelity

Categories	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>
Intercept	2654.192	1	2654.192	15.376	.000
Religion	1503.044	1	1503.044	8.707	.004
Gender	799.884	2	399.942	2.317	.103

In the two additional Ancova, in which the dependent variable was changed to perceptions of behaviors that represent emotional and sexual infidelity, the results were similar. Although in the univariate analyses described above, gender was significantly associated with these subscale scores, when the analyses controlled for religion, gender was no longer significantly associated.

Table 9

The Effect of Gender on Perceptions of Behaviors of Emotional and Sexual Infidelity

Categories	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>
Emotional Cheating					
Intercept	133.646	1	133.646	18.630	.000
Religion	91.584	1	91.584	12.767	.000
Gender	28.302	2	14.151	1.973	.143
Sexual Cheating					
Intercept	277.325	1	277.325	18.641	.000
Religion	101.241	1	101.241	6.805	.010
Gender	62.354	2	31.177	2.096	.127

The Effect of Sexual Orientation

In the final set of analyses for this study, I examined the association between sexual orientation and perceptions on specific behaviors that may constitute online infidelity, while controlling for gender and religion. Again, I included the total scale score on the Docan-Morgan Internet Infidelity Questionnaire as the dependent variable. This time I entered sexual orientation as the independent variable and gender and religion were included as covariates. The results of this analysis, shown in Table 10, indicate that even when controlling for the effects of gender and religion, sexual orientation is not significantly associated with perceptions of behaviors of online infidelity.

Table 10

The Effect of Sexual Orientation on Perceptions of Behaviors of Online Infidelity

Categories	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>
Intercept	3313.964	1	3313.964	18.929	.000
Religion	1582.822	1	1582.822	9.041	.003
Gender	486.153	1	486.153	2.777	.098
Sex. Orient.	10.761	1	10.761	.061	.805

In the two additional Ancova, in which the dependent variable was changed to perceptions of behaviors that represent emotional and sexual infidelity, the results were similar: when controlling for gender and religion, sexual orientation is not significantly associated with either subscale (see Table 11).

Table 11

The Effect of Sexual Orientation on Perceptions of Behaviors of Emotional and Sexual Infidelity

	Type III Sum of Squares	df	Mean Square	F	p
Emotional Cheating					
Intercept	163.258	1	163.258	22.534	.000
Religion	94.166	1	94.166	12.997	.000
Gender	19.160	1	19.160	2.645	.106
Sex. Orient.	.402	1	.402	.055	.814
Sexual Cheating					
Intercept	252.076	1	252.076	16.589	.000
Religion	113.968	1	113.968	7.500	.007
Gender	19.786	1	19.786	1.302	.256
Sex. Orient.	3.962	1	3.962	.261	.611

Summary

I used the results described in this chapter to address the study research questions that aimed to understand how age, gender, and sexual orientation is associated with individual perceptions of specific behaviors that represent online infidelity. The research questions and associated hypotheses are shown in Table 12. The analyses of covariance that were conducted to address these research questions indicated that when controlling for gender and religion, which were found to have a significant univariate association with the dependent variables, none of these predictors was significantly associated.

Table 12

Summary of Research Questions and Hypotheses

Research Question	Hypothesis	Finding
RQ1: To what extent does a significant variance exist between age groups in terms of the perceptions on specific behaviors that may be interpreted as online sexual cheating?	There is a significant difference between age groups in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.	Not supported
RQ2: To what extent does a significant variance exist between gender in terms of the perceptions on specific behaviors that may be interpreted as online sexual cheating?	There is a significant difference between gender in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.	Not supported
RQ3: To what extent, if any, is there a difference between sexual orientation in terms of the perceptions on specific behaviors that may be interpreted as online sexual cheating?	There is a significant difference in sexual orientation in terms of perceptions on specific behaviors that may be interpreted as online sexual cheating as defined by the Docan-Morgan Internet Infidelity Questionnaire: online sexual cheating, online emotional cheating, online pornography uses, and overall sexual cheating behaviors.	Not supported

Implications of these findings were discussed in Chapter 5, along with a comparison to the findings from prior research considering factors that constitutes online relationship cheating. In addition, study strengths and limitations were discussed. Chapter 5 concluded with a synopsis of future suggested directions for this line of research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative, causal comparative study was to investigate and determine if there were significant age, gender, or sexual orientation differences in perceptions of online sexual activities that may be interpreted as relationship cheating. I compared the perceptions of online sexual activities based on gender and sexual orientation and explored whether the continuous variable of age was a significant covariate, suggesting differences in perceptions based on age. The independent variables in the study were age, gender, and sexual orientation while the dependent variable was the perceptions of online sexual activities that may be interpreted as relationship cheating. Pain and other negative emotions are experienced by couples of all genders when confronted with partner infidelity. An understanding of how these behaviors of sexual infidelity are perceived by individuals in committed relationships may help identify relationship problems so that in at least some cases, couples open a difficult dialog either alone or with the help of a therapist to avoid relationship dissolution. I also considered whether there has been a cultural shift in how the variable groups view the phenomenon of online relationship behaviors.

Summary of Study Findings

Research Question 1

The first research was: To what extent does a significant variance exist between age groups in terms of the perceptions on specific behaviors that may be interpreted as online sexual cheating? Results from the analysis of this question were non-significant

suggesting that there were no differences regarding the role of age in perceptions of online infidelity. That is, whether the participant was an emerging adult (21- 29 years) or adult (30-45 years) did not appear to be related to his or her perceptions of online infidelity at any of the three levels of the dependent variable (i.e., overall, sexual, and emotional infidelity). Several control variables were also included in the multivariate level of analysis (i.e., religion, ethnicity, relationship status, years married, years in relationship, ever divorced, has children, years of education, income, and Internet use weekly). At the univariate analysis, only religion was significant and, therefore, this was the only control variable included in the multivariate analyses.

Research Question 2

The second research question was: To what extent does a significant variance exist between gender in terms of the perceptions on specific behaviors that may be interpreted as online sexual cheating? At the univariate level of analysis, support was found for the role that gender plays in perceptions of online cheating. Specifically, it was found that women scored higher on perceptions of online infidelity. However, at the multivariate level gender failed to be significant after controlling for the impact of religion. Therefore, the present study failed to disprove the null hypothesis on the role of gender in perceptions of online infidelity. Whether the participant was a woman or man did not appear to have an impact on his or her perceptions of online infidelity at any of the three levels of the dependent variables (i.e., overall, sexual, and emotional infidelity) after accounting for religion.

Research Question 3

The final research question was: To what extent, if any, is there a difference between sexual orientation in terms of the perceptions of specific behaviors that may be interpreted as online sexual cheating? Again, the present study failed to reject the null hypothesis on the role of sexuality in perceptions of online infidelity at either the univariate or multivariate level. Whether one is heterosexual, bisexual, or homosexual did not appear to have an impact on his or her perceptions of online infidelity at any of the three levels of the dependent variable (i.e., overall, sexual, emotional infidelity).

Interpretation of the Findings

Age

This examination was undertaken due to the large gap in research on the role that online infidelity plays in the relationships of older adults (Ucar et al., 2016). In one study, it was found that among heterosexual men and women, older individuals displayed greater confusion over what constitutes online infidelity (Hines, 2012). However, the current study found no support that differences exist between emerging adults (21-29 years) and adults (30-45 years) on the perceptions of what constitutes online infidelity. One potential explanation for this discrepancy may be that Hines (2012) examined perceptions of infidelity from a different perspective than the current study, leading to a lack of replication within the findings. For example, researching offline and online cheating simultaneously rather than focusing solely on online cheating may have led to a comparison by participants of offline and online cheating within the Hines study. If true, this comparison may have skewed participants' perspectives of online cheating when

responding during the Hines study, causing the findings to differ from that of studies examining perceptions of online infidelity in isolation. Hine's study focused on a group over 45 years of age, a group excluded from this study. Both offline and online betrayal are considered as an equally serious breach of trust that alters or destroys the couple's story of attachment (Gerson, 2011; Whitty, 2005). However, Dijkstra et al. (2013) found that offline cheating elicited a higher intensity emotional reaction in both genders of heterosexual individuals. The middle age group potentially had a longer period of attachment that could lead to more intense emotional reactions on discovering a partner's betrayal. Therefore, research on cheating in the middle-aged group, termed as defined middle adult in this study (in Dijkstra's work his group was older than this study's defined middle adult group) with simultaneous focus on both online and offline cheating that may yield skewed results due to the different reactions to in-person compared to cyber infidelity.

A final potential explanation relates to the present study breaking the participants into two age groups: emerging adulthood (21-29 years) and adults (30-45 years). The study sample focused on persons who were either married or involved in a committed relationship. In keeping with the Erikson (1994) definition of middle-aged, the age group 30-45 years was selected. These groups were more closely associated with the impact of technology into their lives. This is especially true of the younger adults who have little, if any, concept of a time without cell phones and computers, tablets, and other devices. The emergent adult age group was set as 21-29 years to include individuals just younger than the middle age group including the possibility of either being married or in a committed

relationship. Very few individuals younger than 21 years would fall into the married or committed relationship group. Many participants ($n = 97$, 71%) were in the adult range, with only 39 falling between the ages of 20-29 years (29%). The overrepresentation of older adults in the population, 44% who were in the 30-45-year age range, may have masked any potential differences between the two age groups by overriding the perceptions of the emerging adults (21-29 years). There is no record in the past literature of whether this issue has occurred in prior studies. Future studies should be conducted to expand knowledge on the potential differences between the young and the mature adults on perceptions of online infidelity, specifically with a more balanced spread of participants by age. The emerging adults were born into technology as a human communication method, middle adults were watchers and often reluctant adopters of technological communication development and the over 45 group are likely to only adopt what part of technology is useful to them. Because technology as a communication instrument is at the heart of this study, I would have preferred a more balanced age participation. Future researchers should aim to include an equal number of participants in the chosen age groups (emerging adults versus middle-aged) in their sample to avoid overrepresentation of an age group.

Gender

The second hypothesis was that there would be gender differences in perceptions of online infidelity. This hypothesis was supported at the univariate level where females were found to have higher ratings of perceived online infidelity, but the null hypothesis could not be rejected at the multivariate level. This was unexpected and stands in contrast

to the literature as numerous studies have highlighted gender differences in approaches to relationships and cheating. For example, DeSteno and Salovey (1996) found differences in distress levels between men and women. Specifically, men showed greater concern over sexual infidelity and women over emotional infidelity. Buss (2018) also incorporated SST into an analysis on the role of gender and argued that men and women have separate sexual selection strategies due to distinct biological needs. Several others identified the increased tendency of men to separate love and sex (Banfield & McCabe, 2001; Duncombe & Marsden, 1993; LaSala, 2005) and the greater likelihood to pursue sex in the absence of emotional attachment when compared to females (LaSalle, 2005; Townsend, 1995). It is not clear why the perspectives of the participants in this study did not differ significantly as found in previous studies. The female participants were found to react stronger on the notion of cyber infidelity but not significantly so. This could be indicative of a change in perceptions regarding cyber relationships and cheating. Alternatively, the women in this study might react differently from previous studies based on previous experience of online relationships. This seeming trend where women do not differ much from their male counterparts in their reaction to online cheating warrants additional exploration.

After controlling for religion, support for the different reactions on cheating was not found in the present study. However, there are several facets to this lack of support that may account for such a discrepancy. First, I did not examine distress levels or sexual selection strategies. Rather, I looked at what is considered cheating online. Therefore, the conclusions brought from the three studies may be that differences exist in distress over

different types of cheating but not in what is considered cheating (Banfield & McCabe, 2001; Duncombe & Marsden, 1993; LaSala, 2005). Moreover, the sample size in this study consisted of primarily of women ($n = 100$, 70.9%). Much like the discussion of the potential implications of an overrepresentation of adults in the study, the overrepresentation of women may have biased the analyses to favor female perceptions and underrepresent the views of men. Such an underrepresentation may have distorted and minimized any differences obtained in the statistical analysis in views of online infidelity between men and women. There is limited evidence that this occurred in prior studies on the topic. Differences in representation of study sample groups were found in the study of Dijkstra et al. (2013) with 62% belonging to the heterosexual group and only 38% representing the homosexual group. Jain et al. (2018) also compared heterosexuals with homosexuals with an overrepresentation of heterosexual participants. In the Jain et al. (2018) study of the 11,056 respondents, 8,991 were heterosexuals, 1,010 homosexuals, and 1,055 bisexuals). Schneider et al. (2012) reported an overrepresentation of female respondents with 85.3% women and only 14.7% men participating in their study on cybersex infidelity.

When considering the possible skewing effect of overrepresentation of the middle-age group and women, it is the near significant result at the .10 level for all levels of the dependent variable that supports this idea. Although the current study had a significance value of .05, the significance at the .10 level is important to note, especially compared with the largely nonsignificant results of the other variables. Regarding overall infidelity, gender fell at .103 as opposed to .495 and .805 for age and sexual orientation,

respectively. Comparable results were present for emotional and sexual infidelity with gender falling at .143 and .127. In contrast, age fell at .472 for emotional infidelity and .398 for sexual infidelity; sexual orientation fell at .814 and .611. At the .05 level, this may not make a difference. However, viewed through a more lenient significance level, the data indicated a near significant relationship between gender and perceptions of online infidelity at all three levels of the dependent variable, a trend that was not consistent across age and sexual orientation. It is possible that the results would be consistent with the findings of DeSteno and Salovey (1996) and that differences between genders on perceptions of online infidelity would exist with a more balanced sample of males and females. DeSteno and Salovey concluded that the sex-jealousy link described by Buss et al. (1992) should be further explained by taking into consideration the individual's beliefs about sexual and emotional cheating. In the current study with its overrepresentation of women whose perceptions of sexual and emotional cheating are more likely to be similar, it could lead to the insignificant differences in gender perceptions of online infidelity. The acknowledged differences between men and women support such an interpretation of the potential for the important role of gender in views on online infidelity (Banfield & McCabe, 2001; Duncombe & Marsden, 1993; Hines, 2012; LaSala, 2005; Risman & Schwartz, 2002). For instance, Banfield and McCabe found that women seldom engage in pure sexual extramarital affairs but rather emotional or combined affairs. This finding is complemented by Duncombe and Madsen's (1993) study showing that women are more often unhappy because of their husband's inability or unwillingness to engage on an emotional level. Each of previous studies as well as

many more not cited here support the conclusion that gender, specifically female gender have a difference and often stronger reaction to all types of relationship infidelity. The results of this study, which do not show such a dramatic impact on the perception of online infidelity could be impacted by the greater number of female respondents. Another possibility is that a cultural shift may be occurring where females have a more egalitarian view of the very nature of commitment. The change could be created by several factors including the diminishing impact of religion in defining values and behaviors, the higher levels of education and meaningful employment of women, the impact of all media including computer technology to define lifestyle with music, movies, novels, and television. Consider that only 50 years ago most Americans disdained unmarried couples living together and children of unmarried women were still considered “illegitimate.”

The study of gay male couples indicated that men in open relationships kept the sex and intimacy apart on a cognitive level whereas the opposite was found in the monogamous group. Future studies should take the role of gender (over)representation in sampling into consideration in the recruitment process. These findings do support the value of some segments of the SST grounding theory that remain predictive of reactions to infidelity.

Sexual Orientation

The final hypothesis in this study pertained to the impact of sexual orientation on perceptions of online infidelity. Again, the present study found no support for differences in perceptions between homosexual and heterosexual participants. This finding was unexpected as past research has shown consistent differences between these two groups

on Internet usage and views of infidelity. For example, Frederick and Fales (2016) found that individuals in same-sex and bisexual relationships had the same level of distress over emotional infidelity, which was not always true for heterosexual couples. McKie et al. (2017) framed this difference because of “gay culture,” noting that this community has its own unique views on infidelity. Turke (1990) highlighted these unique views in his finding that heterosexual males demonstrated greater distress over sexual infidelity in comparison to homosexual men. Others have identified the greater prevalence of sexting among same-sex individuals (Wysocki & Childers, 2011) and differences in the drivers of infidelity based on sexual orientation (Jain et al., 2018). Jain et al. compared cybersex activities of minority groups, which he defined as homosexuals and bisexuals, with heterosexuals and found that each group reported different instigating factors for engaging in cybersex. Where heterosexuals engage in cybersex activities out of social isolation, homosexuals reported psychological distress and bisexuals cited environmental influence as reasons for their cybersex activities. The nonsignificant results in the present study regarding the role of sexuality and gender also contradicted past findings on the gender differences that exist across same-sex couples. Moreover, even within the gay and bisexual community, differences exist by gender. Non-straight women were found to send sexual images at a slighter higher rate than non-straight men (Wysocki & Childers, 2011). Similarly, Bailey et al. (1994) found that homosexual women were like their heterosexual counterparts in their reactions to emotional infidelity, but the same trend was not found when comparing homosexual and heterosexual men. Additionally, Holmberg and Blair (2009) identified that male same-sex couples had sex more

frequently than their same-sex female counterparts. Despite this, several pieces of literature also highlighted the similarities between homosexual and heterosexual couples. In addition to the similarities between heterosexual and homosexual women outlined by Bailey et al. (1994), Docan-Morgan and Docan (2007) also found that infidelity concerns frequently present themselves regardless of sexual orientation. As demonstrated, prior studies pointed to differences in perceptions between homosexual and heterosexual participants, which emphasizes the unexpectedness of the current findings where no support for differences in perceptions between homosexual and heterosexual participants was found. In this group, like the gender variable seem to be trending toward each other rather than being distinctly and forever different.

The results of this study appeared to support the findings of similarities between same-sex and heterosexual couples by finding no difference in perceptions of online infidelity across the three levels of the dependent variable. Although a strength of the study was the substantial proportion of middle-aged individuals, it should be noted that the dispersion of same-sex and bisexual individuals within the study was extremely low. Most participants in this study identified as heterosexual ($n = 125$, 91.2%) as opposed to homosexual ($n = 12$, 5.1%). The remaining 3.7% did not report on their sexual preference. Note that the categories of bisexuality ($n = 5$, 3.6%) and homosexuality ($n = 7$, 5.1%) were collapsed into one single measure of homosexuality. Given evidence to suggest that differences between couple type matter and the possibility that bisexual individuals could end up in either type of relationship, responses may vary based on the type of relationship they are in at the time of the study and the “appropriate” category

placement may also vary when creating a dichotomized measure of sexuality. Cultural changes, including legalization of same sex marriage and social acceptance of same sex couples may also identify a cultural trending the media such as movies and television has helped to create.

These study outcomes do not invalidate the SST, the grounding theory of this study, but do provide insights to a more modern view consistent with new gender roles, human motivation for partnering, and combine them with age old needs for safety, security, ego support, and a feeling of uniqueness.

Sexual Strategy Theory

The nonsignificant findings of this study and the failure to disprove the null were not consistent with the literature on SST. The lack of significant differences on perceptions of infidelity by gender, sexual orientation, and age may provide support for the lack of applicability of the traditional versions of SST. The lack of differences found based on gender might provide support for the proposition that the assumptions of traditional SST are outdated. For example, because women no longer require men to produce offspring (Kushnir et al., 2017, p. 7), gender differences in perceptions of online fidelity may not be pronounced as both men and women are on the same level when it comes to risk and investment in dating. Modern birth control methods and abortion options place women on the same risk level as men in the decision to produce offspring (Frederick, & Fales, 2016). Online infidelity places both genders on the same level of emotional insecurity or risk which is likely to minimize gender differences in perceptions of infidelity. Likewise, this study's findings of the lack of difference between same-sex

and heterosexual individuals supported the same conclusion. Given that same-sex couples have alternative options for reproducing, the same amount of risk may be involved in online infidelity as their heterosexual counterparts such as those used by non-fertile heterosexual women (Kushnir et al., 2017, p. 2). The legalization of same-sex marriage likely facilitates such a baseline across sexualities by providing same-sex couples the same level of investment as heterosexual couples. Finally, the life stage of middle-aged individuals of any sexual orientation means that the stage of seeking commitment to produce offspring has passed (Atkins et al., 2001; Hines, 2012). Therefore, the lack of difference based on age again supports that perceptions of online infidelity are unlikely to be driven by an evolutionary desire to produce children.

When applied to the more contemporary social-cognitive view of SST (Schmitt, 2003), the results were somewhat more applicable. According to this theory, middle-aged adults are more likely to seek individuals based on identity and values given a lack of focus on childbirth. Additionally, individuals of all ages seek long term mates based on qualities such as mate suitability. Several authors argue that men focus more on the short-term strategy of mate seeking while women are more concerned with the long-term strategies (Buss, 1998; Buss & Schmitt, 1993; Russock, 2011; Schmitt, 2003). Generally, previous research showed significant gender differences in women's reactions attributed to any form of infidelity, including online infidelity with women reacting more strongly than men. The findings in the current study failed to support these gender differences at a significant level and offered weak support for the social-cognitive theory of SST.

The different life circumstances of middle-aged individuals and emerging adults indicate that middle-aged adults are less likely to still be experiencing the “honeymoon phase” of their relationship (Atkins et al., 2001; Hines, 2012) and are more likely to seek opportunities outside of the committed relationship to find the excitement that is associated with the “honeymoon phase” of new relationships (Bersandring et al., 2009; Reese-Weber, 2015, p. 209). Like the issue of gender, a logical conclusion based on either version of SST is that younger individuals would react more severely to online infidelity given the focus on childbirth, likelihood of young children in the home, and the experience of a “honeymoon phase” where feelings for significant others are more intense. The current study identified no significant differences by age despite a roughly equivalent sample of both emerging adults and adults. The overall findings of this study offered support for the inadequacy of traditional SST to account for modern relationships due to the nonsignificant findings of differences in perceptions of online infidelity. Traditional SST suggests that men would be less likely to have high ratings of online infidelity given their disposition towards having numerous sexual partners. In contrast, women should have higher ratings given they seek out commitment from a single mate and should be more sensitive to potential threats to commitment via online infidelity. However, the nonsignificant findings also failed to support the social-cognitive view of SST as this more modern version suggests differences based on gender. I failed to find any significant differences for gender at the multivariate level. However, there are limitations to this study that indicate reasons for taking caution in assuming these theories

are not applicable to modern relationships (i.e., underrepresentation of men and homosexual participants).

Limitations of the Study

One of the key limitations of this study stemmed from the recruitment process. Although recruitment occurred in the most feasible method possible, self-selection via a convenience sample, several potential biases may have been introduced into the study. Perhaps the greatest is the role that the salience of sexuality may have played in the decision to participate in the study and survey. Views over the role of homosexuality in religious institutions and biblical interpretations (Schulte & Battle, 2004; Whitehead & Baker, 2012) may have simultaneously resulted in a greater number of religious participants and lower number of homosexual and bisexual participants. The breakdown of the sample supported such a conclusion: homosexual ($n = 7$, 5.1%) and bisexual ($n = 5$, 3.6%) participants only made up .09% of the sample while Christian ($n = 77$, 56.2%) and Catholic ($n = 17$, 12.4%) individuals made up 68.61% of it. Adding the category of other ($n = 13$, 9.5%) to this calculation would bump this up to 78.10% of the sample, although it is unclear whether this constituted religious beliefs that may stand in opposition to the homosexual and bisexual community. Due to the demographic makeup of the sample, the results of this study may have limited the external validity.

As a result, two types of bias, response bias and social desirability bias, may have occurred in the present study. Although the participants remained anonymous to minimize bias, it might still be present subconsciously. Response bias might be found due to a study group's desire to present their group in a more positive light, similarly

individuals might represent themselves in a more positive manner due to social desirability bias (McGee et al., 2016). Although the study was anonymous, the presence of negative religious beliefs toward same-sex relationships (Schulte & Battle, 2004; Whitehead & Baker, 2012) may have inclined either side to answer in a way that portrayed their community in a more favorable light. The low representation of bisexual and gay participants and the snowball recruitment further exacerbate this concern as discussion regarding the potential purpose of the topic and the answers that were provided may have occurred. A larger sample of individuals from the LGBT community might have flushed out any significant influence of this bias on the findings. However, the absence of such snowball recruitment may have led to an even greater discrepancy in the representation of this community in the current study. In my desire for random participation, this study also struggled with a lack of representation of the sample and, therefore, lack of generalizability of the findings. A sample consisting of mostly Caucasian, religious, straight, and female participants may have resulted in underestimated significance levels. Generalizations are possible but should be applied with caution to groups outside of the boundaries delineated by the sample characteristics in the present study. I debated the idea of asking for anonymous participation from specific LGBT groups to improve the variety but chose not to do so, to rather see how randomness would provide participants. The participation ratios roughly mimicked the demographics of the country in general.

The quantitative study design limited the study to responses to preset survey questions which did not offer the opportunity to ask for clarification. Another obvious

bias was that any participant regardless of viewpoint would have to be a user of social media or they would not be aware of the study and would have to be somewhat computer and internet competent. This bias alone could overlook individuals with less access, less education and less resources. A mixed method with its qualitative component, although not offering generalizability, could provide more answers to the different results obtained in this study. Despite some challenges to external validity, internal validity was a strength of this study.

Researcher bias can influence the findings of any study. Since this was a quantitative study, researcher bias was not expected to represent a significant threat to validity because, the data and results spoke for themselves. Even if I were to draw erroneous conclusions, the results of the statistical analysis presented would assist readers to interpret the analysis results for themselves. I did, however, take great care to remain impartial.

Recommendations

The primary recommendations for future research are to build on the present study in a way that accounts for its weaknesses. First, by diversifying the sample (including increasing the inclusion of men and individuals who are not heterosexual), a more well-rounded examination of perceptions of online infidelity could be conducted. The key areas to be targeted are in recruiting are more men regardless of sexual preference, and more LGBT individuals regardless of gender. Future research should either clarify the relationship status of individuals (i.e., same-sex vs. heterosexual) at the time of the study or utilize three separate categories of sexuality (i.e., same-sex, bisexual,

heterosexual) to clearly identify the separate impact of sexuality and relationship status on perceptions of online infidelity. More importantly, future studies should ensure a larger sample of individuals from the LGBT community to more effectively analyze any potential trends in the perceptions of online infidelity within these groups.

Further, including a measure that explores participant understanding of online infidelity would account for the confusion Hines's (2012) found in middle-aged participants. By examining how comfortable participants are with technology and terminology associated with online infidelity, a clearer picture would emerge of differences between individuals who grew up with technology and those who learned it in later life (Knox et al., 2008). This would also allow for the delineation of whether time has closed the gap in the confusion of online infidelity among emerging adults and adults. Moreover, measuring more than just what is perceived as online infidelity (e.g., distress levels in response to each form of infidelity) or adding open-ended questions to the survey to explore why such acts were or were not considered infidelity would allow for more clarification as to the relevance of either form of SST to modern dating. Specifically, examine McKie et al.'s question: do same-sex couples score the same as heterosexual couples on perceptions of online infidelity because of the greater relationship investments associated with the legalization of same-sex marriage or have heterosexual couples moved more towards the perceptions of infidelity that are associated with what McKie et al. define as "gay culture" (McKie et al., 2017) now that technology has expanded opportunities?

Similarly, a scale of how much religious views guide one's perceptions of what constitutes online cheating would provide additional insight into the potential influence of religious beliefs—whether related to homosexuality or adultery—on the ratings. Such a scale would clarify whether the present study's findings were a result of religious beliefs, bias, or issues with representation. If individuals consistently rated religious beliefs as low in relation to ratings, then it is likely that the findings are the result of bias or representation and indicate a strong need for future studies that account for these issues. In contrast, if it is rated highly, then the relationship between religious beliefs and perceptions of online infidelity should be undertaken to better inform treatment of relationship issues related to this topic. Additionally, rather than focusing on sexuality, a question that identifies the type of relationship one is currently in would more accurately measure the role of sexuality on perceptions of infidelity. Alternatively, utilizing both types of measures (i.e., sexual orientation and current relationship type) would allow for a more expansive examination of the role of sexual orientation on views of online cheating given the differences found in heterosexual and same-sex relationships.

Researchers might undertake qualitative research on the topic to collect narrative data on participants' experiences of Internet infidelity. When drawing from participants, heterosexual and homosexual groups with equal representation of all genders and sexual orientation, who actually experienced such infidelity a unique dataset could be obtained for phenomenological analysis.

Implications

The implications for positive social change related to the findings of the present study are three-fold. First, there are the implications for the theoretical basis and applicability of the traditional (Buss & Schmitt, 1993) and social-cognitive versions of SST (Schmitt, 2003). The lack of significant findings for differences in perceptions of online infidelity calls into question the applicability of SST to modern day relationships. Combining the findings of the present study and contemporary developments in alternative birthing methods (Kushnir et al., 2017, p. 2) offer a logical argument about the failure of traditional SST to explain relationships in 2019. Rejection of the social-cognitive version of SST can be drawn from the findings of the current study, but a rationale for doing so is more difficult to develop. It may be the study fails to explain modern day relationships. Or, more likely, limitations to the study or the nature of the dependent variable may be more difficult to frame directly within SST. It may be that, aligned with SST, there are differences in reactions to online cheating based on one's gender, age, and sexual orientation. However, the variables in the present study may not have captured this but instead captured what is defined as online infidelity. The variables still related to SST as they provided information for future studies in the examination of distress. Only by first understanding what represents a violation of evolutionary drives or compatibility in mate-seeking can anyone then examine the potential unique reactions to these violations across populations.

Second, there are the implications regarding how the present study fits into past literature and informs future studies. Overall, the results of this study failed to replicate

the findings of past studies on differences in evaluating relationships based on gender, sexuality, and age. The lack of significant differences by gender and age stood in stark contrast to previous findings. The current findings did replicate some of the conclusions in past literature on differences in relationships based on sexuality. Specifically, prior studies have highlighted that similarities exist between same-sex and heterosexual views of infidelity (Bailey et al., 1994; Docan-Morgan & Docan, 2007). However, the general literature on this topic is mixed with some finding differences based on sexuality (Frederick & Fales, 2016; Jain et al., 2018; McKie et al., 2017; Turke, 1990; Wysocki & Childers, 2011) and others finding similarities (Bailey et al., 1994; Docan-Morgan & Docan, 2007). Given the research gap in middle-aged individuals both generally and those who identify as LGBT, the present study provided a starting point for future studies on this topic. The findings implied that, over time, the differences between age based on exposure to technology may have decreased as the older generation became more familiar with social media and other technology that is related to online infidelity. Similarly, it may be that the legalization of same-sex marriage or the changing views of the female role in society may have brought men and women's perceptions of online infidelity closer together resulting in the non-significant findings of the current study. Therefore, by providing an assessment of attitudes toward sexual mores and societal memes, the study contributed to positive social change by offering a record of perceptions of online infidelity in 2019. This record can then be compared to prior studies and studies in the future to track the development of attitudes over time.

Finally, there are the practical implications regarding the treatment of relationships suffering from infidelity and the impact of social media on the functioning of society. This is of specific relevance to mental health practitioners. Findings of the present study may help counselors examine whether the individuals coping with mental health challenges (e.g., latent anger, depression, shame, isolation, eating disorders, prolonged grief, any other suppressed emotion) are struggling because of relationship challenges and infidelity and open the discussion (Whitty & Quigley, 2008). One form of couple's counseling that could integrate these findings is Integrative Behavioral Couple Therapy, which focuses on problems resulting from relationship expectations and communication issues (Greenan & Tunnell, 2003). One specific challenge is a misunderstanding among couples of what constitutes cheating (Hines, 2012). The newness of technology to middle aged individuals may increase their susceptibility to this confusion: I contributed to developing the initial stages of understanding what individuals across gender, sexuality, and age may consider as cheating. One conclusion is that there may be no significant differences in views of cheating and counselors should seek to encourage honesty about the intentions of the cheater rather than treating this as a misunderstanding. However, individual context should still be considered, and this suggestion should be taken lightly until future studies attempt to replicate these findings.

Additionally, this study can add to the body of research by noting changes in the understanding of what constitutes online infidelity to modern day couples, perhaps facilitating conversation and understanding of unacceptable behaviors in the relationship perhaps early enough to save it from dissolution. This study represents a small but current

view of whether certain online activities may or may not rise to the level of infidelity. I hope is contributes to the call for societal change in one of the most important parts of our culture, how we create and disrupt families. This study's findings suggest that there may be more agreement on what constitutes online infidelity across age, gender, and sexual orientation than previously thought. This is particularly important given the belief that McKie et al.'s "gay culture" may lead to unique views of what constitutes infidelity for same-sex couples (McKie et al., 2017). The present study indicated that same-sex couples should be viewed similarly to heterosexual couples when addressing risk for infidelity on social media and online dating platforms. Likewise, the lack of differences across same-sex and heterosexual views of online infidelity may be an indication sign that the legalization of same-sex marriage brought views of infidelity closer together between same-sex and heterosexual couples. This falls in line with Gottman et al.'s (2003) argument that committed relationships and marriage follow the same path to success regardless of sexuality. Findings suggested that rather than resulting in the perversion of marriage as an institution, married homosexuals have views like those of heterosexual couples. The limits of this study require extensive replication to more effectively examine whether these implications and findings are specific to participants in the study or generalizable to the entire population.

Conclusion

The study sought to contribute to the research gap on perceptions of infidelity in different sex and same-sex couples through a non-experimental, survey-based study of online infidelity behaviors. It was expected that there would be significant differences in

perceptions of online infidelity (i.e., overall, sexual, and emotional) based on age, gender, and sexuality. An extensive literature review through the framework of sexual strategy theory demonstrated a clear trend in differences in perceptions of infidelity based on gender and age, with more mixed results in differences based on sexuality. However, the gap in studies based on participants' age and sexuality require additional studies on what perceptions may be unique to middle-aged and same-sex couples. The findings for the present study offered support for no difference between emerging adults (21- 29 years) and adults (30-45 years), same-sex and heterosexual couples, or male and female partners. It further challenged the applicability of SST to modern day relationships as evolutionary-based differences within these populations, especially based on gender, are the foundation of this theory. Limitations in equal representation of men and same-sex couples in the present study should be considered when applying the findings in any general way. Expansion of instant communication including real time video has changed the daily lives, perspectives, and behaviors of people, of which changes in individual perceptions of infidelity might be one. A better understanding of the impact of such online behaviors will become increasingly relevant and necessary in order to better support couples faced with these challenges.

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Appendix A: Docan-Morgan Internet Infidelity Questionnaire

Docan-Morgan, T., & Docan, C. A. (2007). Internet Infidelity Scale [Database record].

Retrieved from PsycTESTS. doi: <http://dx.doi.org/10.1037/t24758-000> Instrument Type:

Rating Scale Test Format: The Self Infidelity and Partner Infidelity versions of this

questionnaire each contain 44-items and employ the following scale: 1 = not infidelity, 2

= slight degree, 3 = considerable, 4 = strong degree, 5 = highest degree of infidelity.

Source: Author supplied Original Publication: Docan-Morgan, Tony, & Docan, Carol A.

(2007). Internet infidelity: Double standards and the differing views of women and men.

Communication Quarterly, Vol 55(3), 317-342. doi: 10.1080/01463370701492519

Permissions: Test content may be reproduced and used for non-commercial research and

educational purposes without seeking written permission. Distribution must be

controlled, meaning only to the participants engaged in the research or enrolled in the

educational activity.

PLEASE NOTE: I DO HAVE EMAIL PERMISSION FROM DR. DOCAN-MORGAN

TO USE THIS SURVEY FOR MY DISSERTATION

Appendix B: IRB

This email is to notify you that the Institutional Review Board (IRB) has approved your application for the study entitled, "Perceptions of Online Cheating: Impact of Age, Gender, and Sexual Preference Among Committed Couples."

Your approval # is 10-29-18-0041573. You will need to reference this number in your dissertation and in any future funding or publication submissions. Also attached to this e-mail is the IRB approved consent form. Please note, if this is already in an on-line format, you will need to update that consent document to include the IRB approval number and expiration date.

Your IRB approval expires on October 28th, 2019. One month before this expiration date, you will be sent a Continuing Review Form, which must be submitted if you wish to collect data beyond the approval expiration date.

Your IRB approval is contingent upon your adherence to the exact procedures described in the final version of the IRB application document that has been submitted as of this date. This includes maintaining your current status with the university. Your IRB approval is only valid while you are an actively enrolled student at Walden University. If you need to take a leave of absence or are otherwise unable to remain actively enrolled, your IRB approval is suspended. Absolutely NO participant recruitment or data collection may occur while a student is not actively enrolled.

If you need to make any changes to your research staff or procedures, you must obtain IRB approval by submitting the IRB Request for Change in Procedures Form. You will receive confirmation with a status update of the request within 1 week of submitting the change request form and are not permitted to implement changes prior to receiving approval. Please note that Walden University does not accept responsibility or liability for research activities conducted without the IRB's approval, and the University will not accept or grant credit for student work that fails to comply with the policies and procedures related to ethical standards in research.

When you submitted your IRB application, you made a commitment to communicate both discrete adverse events and general problems to the IRB within 1 week of their occurrence/realization. Failure to do so may result in invalidation of data, loss of academic credit, and/or loss of legal protections otherwise available to the researcher.

Both the Adverse Event Reporting form and Request for Change in Procedures form can be obtained at the Documents & FAQs section of the Walden web site: <http://academicguides.waldenu.edu/researchcenter/orec>

Researchers are expected to keep detailed records of their research activities (i.e., participant log sheets, completed consent forms, etc.) for the same period of time they retain the original data. If, in the future, you require copies of the originally submitted IRB materials, you may request them from Institutional Review Board.

Both students and faculty are invited to provide feedback on this IRB experience at the link below:

[http://www.surveymonkey.com/s.aspx?sm=qHBJzk\]MUx43pZegKlmdiQ_3d_3d](http://www.surveymonkey.com/s.aspx?sm=qHBJzk]MUx43pZegKlmdiQ_3d_3d)

Congratulations!
Bryn Saunders
Research Ethics Support Specialist
Office of Research Ethics and Compliance
Email: irb@mail.waldenu.edu
Phone: (612-)312-1336
Fax: (626-)605-0472

Walden University
100 Washington Ave. S, Suite 900
Minneapolis, MN 55401

Information about the Walden University Institutional Review Board, including instructions for application, may be found at this link: <http://academicguides.waldenu.edu/researchcenter/orec>

Appendix C: Demographic Questionnaire

Please answer in the most appropriate way for you. But do not identify yourself by name or birthday. All your answers are both anonymous and confidential.

THIS FORM WAS CONVERTED TO A DIGITAL FORMAT FOR THE SURVEY

1 Please list you age: _____

2 Please circle your gender (Answer as you consider yourself)

a.Male b.Female c.Bisexual d. Transgender e. Other: _____

3 Please identify your origin or ethnicity as you identify yourself

- | | |
|------------------------------|---|
| a. White | f. Native American Indian (including Alaskan) |
| b. African-American | g. Indian, Pakistani, Bangladeshi |
| c. Hispanic, Latino | h. Middle East |
| d. Asian or Pacific Islander | e Other: _____ |

4 Please identify your marital status

- | | | | |
|---|------------|-----------------|----|
| a. Married | b Divorced | c Never Married | d. |
| Committed, domicile together, not married | | | |

5 If currently married or in a committed, domiciled relationship, please indicate the number of years

- | | |
|---------------------|-------------------|
| a. Less than 1 year | e 16 to 20 |
| b 1 to 5 years | f. 21 to-25 years |
| c 6 to 9 years | g 26 to 35 years |

d 10 to 15 years

h 36 to 50 years

I More than 50

years

6 What is/was the length of your longest relationship (married or not)?

a. Less than 1 year

e 16 to 20

b 1 to 5 years

f. 21 to-25 years

c 6 to 9 years

g 26 to 35 years

d 10 to 15 years

h 36 to 50 years

I More than 50

years

7 Please indicate is you have been divorced, and if so, how many times

a 1

b 2

c 3

d 4

e 5 f Never

8 If you have children (natural or adopted), please indicate the number

a 0

b 1

c 2

d 3

e 4

f 5

g 6

h 7+

9 What do you consider your predominate sexual orientation?

a Heterosexual

b Homosexual c Bisexual

10 Please indicate the highest level of educational you completed

a 8th grade

b up to 11th grade

c High School grad

d attended college

e 2 year grad

f bachelor's degree

g Technical school grad

h attended grad school

i Masters degree

j Doctoral degree

11 Please select your household income level

- a Less than \$30,000/year b \$31-\$60,000/year
c \$61-\$99,000/year d More than \$100,000/year

12 Please indicate your religious identity

- a None b Catholic c Christian (any denomination) d Muslim
e Jewish f Other

Please describe your weekly frequency of attending religious services

- a None b 1-2 times/week c 2-3 times/week d 4-5 times/week
e 6-7times/week

14 Please describe your weekly Internet usage

- a None b 1 hour or less c 2-3 hours/week d 4-5 hours/week
e 6-8 hours/week f 9-10 hours/week g 10 hours/week or more

Appendix D: Consent Form

CONSENT FORM

You are invited to take part in a research study about how individuals who are in or have been in a committed relationship to assess whether certain internet-based activities reach the level that you would consider relationship infidelity. To qualify you must be between the age of 21 to 45 and reside in the United States to be in the study. You do not need to currently be in a relationship or marriage at this time. Just answer the questions as if you were or rely on how you would have felt in a past relationship or how you would feel if in a current relationship. This form is part of a process called “informed consent” to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Rosanna Kallay, who is a doctoral student at Walden University. You might already know the researcher in a different role but this study is separate from that role.

Background Information:

The purpose of this study is to analyze how age, gender, sexual preference, and other demographic factors impact an individual’s viewpoint of whether certain online activities constitute relationship infidelity in a committed relationship.

Procedures:

If you agree to be in this study, you will be asked to:

- Complete the demographic questionnaire which asks questions about you for statistical purposes but does not collect identifiable data.
- Complete as many questions as you can. You may skip any question that causes you distress and can stop the survey at any time. You do not need have personal experience with any of the scenarios as this study seeks your viewpoint, not your experience.
- Answer question with your honest opinion. There are no right or wrong answers. Remember that your answers are completely anonymous. You may skip any question(s) that cause you discomfort.

Here are some sample questions which ask if the following scenario constitutes relationship cheating in your opinion in a yes/no format:

- Your partner viewing personal ads on the internet
- Your partner using Instant Messenger to communicate with a person he/she met online about relational problems with you

Voluntary Nature of the Study:

This study is voluntary. You are free to accept or turn down the invitation. No one will treat you differently if you decide not to be in the study. If you decide to be in the study now, you can still change your mind later. You may stop at any time. Participants should answer at least 75% of the questions in order for the survey to be included in the study.

Risks and Benefits of Being in the Study:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as stress or becoming upset. Being in this study would not pose risk to your safety or wellbeing. If you find the topic distressing, please stop the study. This study is completely anonymous and all data will be used as aggregated data, not individual responses.

By providing your honest, anonymous viewpoints in this study you will be contributing to a better understanding of how individuals and groups view certain online behaviors at this time in our social history. Hopefully, this will help counselors assist couples in relationship distress as infidelity is often destructive to families and causes personal pain.

2 of 2

Payment:

No payment or gifts can be provided for participation in this study.

Privacy:

Reports coming out of this study will not share the identities of individual participants. Details that might identify participants, such as the location of the study, also will not be shared. The researcher will not use collected data for any purpose outside of this research project. Data will not contain individual identifiable information. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:

You may ask any questions you have now.. If you want to talk privately about your rights as a participant, you can call the Research Participant Advocate at my university at 612-312-1210 Walden University's approval number for this study is **10-29-18-0041573** and it expires on **October 28th, 2019**.

Please print or save this consent form for your records.

Obtaining Your Consent

If you feel you understand the study well enough to decide about participation, please indicate your consent by typing the words: "I consent" and proceed to the demographic section. Thank you.