

FEMALE USE OF THE INTERNET FOR SEXUAL PARTNERS:
SELF-ESTEEM, SEXUAL SENSATION SEEKING, STRESS
AND COPING STYLE

HUMBOLDT STATE UNIVERSITY

By

Anabel Patino

A Thesis

Presented to

The Faculty of Humboldt State University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Arts in Psychology

Counseling

May, 2012

FEMALE USE OF THE INTERNET FOR SEXUAL PARTNERS:
SELF-ESTEEM, SEXUAL SENSATION SEEKING, STRESS
AND COPING STYLE

HUMBOLDT STATE UNIVERSITY

By

Anabel Patino

Approved by the Master's Thesis Committee

Dr. Gregg Gold, Committee Chair

Date

Dr. Melinda Myers, Committee Member

Date

Dr. Emily Sommerman, Committee Member

Date

Dr. Emily Sommerman, Graduate Coordinator

Date

Dr. Jená Burges, Vice Provost

Date

ABSTRACT

FEMALE USE OF THE INTERNET FOR SEXUAL PARTNERS: SELF-ESTEEM, SEXUAL SENSATION SEEKING, STRESS AND COPING STYLE

Anabel Patino

The following project was completed in order to assess the relationship between online use of the internet to find sexual partners and self-esteem, sexual sensation seeking, stress and coping style in a sample of 152 female participants who were at least 18 years of age. Participants were categorized into two groups based on their use of the internet to find sexual partners online. Independent sample T-tests were run in order to uncover the possible relationship between the aforementioned variables. These tests revealed that for the most part the females who had used the internet to find sexual partners did not differ from the females who had not except on the measure of sexual sensation seeking ($t(27.309) = 2.52, p = .018, 95\% \text{ CI } [.602, 5.86]$) and on the self-blame subscale of the Brief COPE measure ($t(148) = 3.19, p = .002, 95\% \text{ CI } [.306, 1.30]$).

ACKNOWLEDGEMENTS

I would like to thank my committee for their support and patience especially, my thesis committee chair Dr. Gold, who has challenged me throughout this process and kept me going with his amazing sense of humor and his incredible knowledge of all things Psychology.

Table of Contents

ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS.....	v
CHAPTER ONE: INTRODUCTION	1
CHAPTER TWO: LITERATURE REVIEW	6
Theoretical Background.....	6
Sexual Sensation Seeking	7
Self-esteem.....	10
Stress.....	12
Coping Style.....	14
Online Sexual Activity	18
Outlet Preferences.	19
Seeking Sexual Partners.....	20
CHAPTER 3: STATEMENT OF THE PROBLEM AND HYPOTHESES	23
CHAPTER 4: METHODS	26
Participants.....	26
Procedure	26
Measures	27
CHAPTER 5: RESULTS.....	30
CHAPTER 6: DISCUSSION.....	34
Implications.....	36
Limitations	37
REFERENCES.....	39
APPENDIX A	47
Rosenberg Self-Esteem Scale	47

APPENDIX B	49
Sexual Sensation Seeking Scale	49
APPENDIX C	50
Brief COPE Scale	50
APPENDIX D	53
Perceived Stress Scale.....	53
APPENDIX E.....	55
Internet Use Questionnaire	55
APPENDIX F.....	56
Informed Consent.....	56
APPENDIX G	58
Debriefing Form	58

CHAPTER ONE

INTRODUCTION

Since its inception, the internet has revolutionized the way people interact with one another. Perhaps most notably, it has affected sexuality (Cooper, Delmonico & Burg, 2000). Now more than ever it seems that the public is constantly being bombarded with ads for new websites for singles who are looking for love or lust. In his compilation of statistics on online use of pornography Ropelato (n.d.) reports that of the adults visiting pornography sites 1 in 3 are women. Ropelato (n.d.) also reports that 9.4 million women visit adult websites each month.

In a study attempting to uncover the reasons for seeking sexual partners online McKenna, Green & Smith (2001) found that the individuals in their sample (62 females, 42 males) turned to the internet for sexual pursuits because: they were concerned with the safety of offline partners, wished for more frequent sexual experiences, larger outlets of sexual expression, and wanted to expand their sexual knowledge in order to improve their offline sexual relationships. Furthermore, participants felt they could express and explore their sexuality more freely with their online partners.

Additional reasons for using the internet for sexual pursuits (Couch & Liamputtong, 2008) include work, being the only single person among friends, being in a new city, the internet being a less difficult way of finding partners and the feeling that rejection by the online partner at first point of contact (if participant decided to meet their partner in person) would have less of an impact on the individual's self-esteem.

Recent research has come to show that females enjoy participating in online sexual pursuits. Cooper et al., (2000) reports that the females which made up his cybersex compulsive group spent 11-60 hours per week online seeking sexual material. Cooper, Scherer, Boies and Gordon (1999) report that in their mostly heterosexual (87%) sample of male ($M= 35.34$ years old) and female ($M= 32.60$ years old) participants, the female participants who were categorized as heavy users of the internet for sexual pursuits ($n= 116$) spent 11-80+ hours per week seeking sexual material online.

Two similar models for why online sexual activity has become so widespread have been proposed by researchers. One has been dubbed the “Triple A Engine” (Cooper, 1998) and the other “The ACE model” (Young, Griffin-Shelley, Cooper, O’mara, & Buchanan, 2000). The Triple A Engine, breaks down into three components, accessibility, anonymity and affordability. The fact that there is a great quantity of websites available, that websites are sometimes free or cheaply priced and people’s communications on these sites can be kept anonymous (by using a different name, address etc.) makes online sexual activity attractive, especially for those who are vulnerable to sexual compulsivity or already are sexually compulsive (Griffiths, 2001).

Similarly, the ACE model also breaks down into three components, anonymity, convenience, and escape. The fact that most online experiences occur in a private place (home or office) that is comfortable and familiar and the fact that the internet can provide a place where one can be a different person and is freed from daily responsibilities and hassles, makes the internet a prime space for the development of online relationships (Young et al., 2000).

How relationships form online (romantic or otherwise) is also something that is still being investigated, but research points to some of the aspects described by the Triple A Engine and the ACE model, most notably anonymity. Because of the anonymity associated with online communications, individuals feel that they are freer to disclose personal information (Suler, 2004). What often follows has been deemed “benign disinhibition”. Suler (2004) defines it as an individual’s propensity to disclose secrets or emotions which can lead to an increased sense of intimacy. This feeling of intimacy therefore lays the foundation for the beginning of a sexual/romantic relationship.

There is some research which points to a change over the years in women’s attitudes towards sexuality, specifically an increase in liberal attitudes (Wells & Twenge, 2005). This change to a more liberal attitude about sexuality and sexual behaviors might be a contributing factor which leads women to seek sexual gratification online, a behavior which studies suggest is more common in men (Albright, 2008; Cooper et al., 1999; Delmonico & Miller, 2003; Perry, Accordino& Hewes, 2007).

Evidence of women’s changing attitudes towards sexuality can be found in a meta-analysis conducted by Wells and Twenge (2005). The meta analysis uses 530 studies published from the year 1943 to the year 1999 examining changes in people’s sexual activity, average age at first intercourse, number of sexual partners, sexual guilt and attitudes toward premarital sex. Studies were included if means and standard deviations were reported, if the means and standard deviations were reported for the entire sample (not groups based on high or low scores on a measure), if the participants were adolescents or adults from the United States or Canada and if the participants were

not part of a special population. The results of this meta-analysis showed that in general and for women in particular, sexual behaviors and attitudes have become more liberal. Particularly, there were increases in the number of female individuals being sexually active, participating in oral sex and holding more liberal attitudes towards premarital sex, while sexual guilt and age of first intercourse decreased.

When we compare the results of the meta-analysis conducted by Wells and Twenge (2005) with those of Oliver and Hyde's meta-analysis done in the year 1993 using articles published from the year 1974 to 1990, one can see the changes over time in sexual behavior and attitudes. Oliver and Hyde (1993) conducted a search using the terms *sexual attitudes* and *psychosexual behavior* of the database PsychLIT, a search using the term *sexuality* of the database Educational Resources Information Center (ERIC) as well as data from large-scale surveys from Blumstein and Schwartz (1983 as cited in Oliver and Hyde, 1993), De Lamater and MacCorquodale (1979 as cited in Oliver and Hyde, 1993), Klassen, Williams and Levitt (1989 as cited in Oliver and Hyde, 1993), Sorenson (1972 as cited in Oliver and Hyde, 1993) as well as surveys conducted by the National Opinion Research Center (Wood, 1990 as cited in Oliver and Hyde, 1993). Any study that had a sample that was not from the United States or Canada, used data that was not original, used a clinical sample or used a sample of individuals being treated for a medical condition were excluded.

The authors found in their analysis that men had higher rates of sexual activity and more permissive attitudes about sexuality in general than women. Specifically, their results indicated that men were much more likely than women to report masturbation and

had less conservative attitudes towards casual sex as well as extramarital sex (Oliver & Hyde, 1993).

Given the tremendous influence that the internet has had on sexuality, the increase in liberal attitudes in women about sex and the factors addressed by the Triple A Engine (Cooper, 1998) and the ACE model (Young et al, 2000), the goal of this thesis was to determine whether differences exist in the psychological characteristics of females who have used the internet to find a sexual partner/s (including partners that were compensated for their participation and partners met in person) and those who have not used the internet to seek sexual partners. Specifically the relationships between self-esteem, sexual sensation seeking, stress and coping styles will be examined, as well as any differences between the groups in the amount of time spent online.

CHAPTER TWO

LITERATURE REVIEW

Theoretical Background

Putnam (2000) hypothesized that compulsive online sexual behavior is maintained through classical and operant conditioning. Specifically, Putnam (2000) postulates that interacting sexually online is positively reinforcing due to the fact that it increases sexual arousal. By definition a positive reinforcer is anything that when added to a situation increases the likelihood that a particular response is given (Hergenhahn & Olson, 2005). An increase in sexual arousal can then lead to masturbation and orgasm, which Putnam states additionally reinforces the individual's online sexual interactions.

Negative reinforcement is also a contributing factor under Putnam's supposition. A negative reinforcer is something that when removed from the environment increases the likelihood of a particular response (Hergenhahn & Olson, 2005). Putnam (2000) claims that individuals, especially those who are already susceptible because of anxiety, depression, stress and interpersonal difficulties, use the internet for sex as a way to cope. Therefore, when the effects of such ailments are temporarily eliminated through the pleasure that online sexual activity brings, the online sexual activity becomes a reinforcer because it is relieving a negative emotional state. Classical conditioning is also involved in online sexual behavior because physiological responses associated with sexual arousal become paired with computer use (Putnam, 2000).

Classical conditioning involves the pairing of an unconditioned stimulus, a conditioned stimulus and an unconditioned response. After the unconditioned stimulus

and the conditioned stimulus are paired together they together elicit a conditioned response (Hergenhahn & Olson, 2005). The conditioned response is the behavior that results after repeated pairings of the conditioned stimulus with an unconditioned stimulus (Hergenhahn & Olson, 2005). Putnam (2000) states that after several pairings in which the person becomes aroused through the viewing of sexual material on a computer, the individual can become sexually aroused through the use of a computer alone. This arousal (conditioned response) through the computer (conditioned stimulus) makes it more likely that sexual urges will be acted upon.

Thus the conditioning and reinforcement together with the individual's available vulnerabilities which are discussed below (i.e., high sexual sensation seeking, low self-esteem, high levels of stress, an emotion-focused style of coping and large amount of time spent online) should interact with the components of the Triple A Engine and the ACE Model. The disinhibition that follows along with women's increase in liberal attitudes towards sexual behaviors may then combine to make online sexual pursuits an attractive option for some women.

Sexual Sensation Seeking

The research regarding sensation seeking and sexual behaviors in women is scarce but the little research that does exist seems to point to a relationship between the two. Kalichman et al. (1994) defined sexual sensation seeking as an inclination to attain the highest level of sexual excitement and an affinity for novel sexual experiences. Parent and Newman (1999) reported that women with high sensation seeking personalities were more prone to having had multiple sexual partners. Parent and

Newman's (1999) sample originally consisted of 103 females but were reduced to twenty, those who had scored below the 25th percentile and above the 75th percentile on a survey measuring sensation-seeking.

In their study of sensation seeking, self-esteem and unprotected sex in a mostly female (75.3%) sample of college students, Gullette and Lyons (2006) found that for both women and men who were high sensation seekers, there was an increase in alcohol use as well as illegal drug use. The authors go on to report that the students who drank alcohol were more likely to engage in an unplanned sexual activity with casual partners and were less likely to use condoms.

In related research, Liao, Millett & Marks (2006) conducted a meta-analysis in order to examine the relationship between online sex-seeking and sexual risk behavior among men who have sex with men (MSM). The authors conducted their search of studies published from the year 1988 until the year 2005 that included the terms internet, online, electronic, websites, chat rooms and cybersex. A second search was conducted with the documents generated by the first search using the terms, MSM, men who have sex with men, gay men, bisexual and homosexual men.

Both searches yielded a total of 20 articles that met the author's inclusion criteria i.e. the studies recruited MSM or gay men and did not pool analyses with populations who were not MSM, the article provided data on the percentage of MSM who use the internet to find sexual partners, percentage that had sex with partners found online, sexual behavior separated into categories dependent on whether the participant did or did not use the internet to find sexual partners or whether the participant was recruited online or

offline. Two additional studies were found that met criteria through a hand search of relevant journals and searching reference lists of articles included in the meta-analysis.

Results showed that HIV-positive and negative participants had higher rates of unprotected anal intercourse (UAI) with partners found online who were HIV-positive, HIV-negative and whose HIV status was unknown. Additionally, results showed higher rates of UAI among HIV-positive participants with HIV positive partners found online compared to those who did not seek sexual partners online. Although this study did not include any females the results point to a relationship between risky sexual behaviors specifically with online sexual partners.

Liau et al. (2006) offer two hypotheses to help explain the results. The first being the self-selection hypothesis which posits that MSM who are more apt to engage in risky sex are also more likely to seek partners online compared to MSM who engage in safer sex. The second hypothesis offered by Liau et al. (2006) is the accentuation hypothesis which states that the internet creates a larger pool of potential sexual partners which therefore increases the likelihood of sexual activity and unsafe sex.

Although the above study is based on an all-male sample, research has begun to document risky sexual practices in women who have met their online sexual partners face-to-face. Padgett (2007) asked about the availability of a condom during a face-to-face meeting with an online sexual partner, of the females who answered the question ($n=281$) 55% said neither person had brought a condom to the meeting. Participants in this study were also asked about actual condom use with online sexual partners, of the

females who answered the question ($n= 381$) 77% said they had not used a condom during their last sexual encounter with an online partner.

Padgett (2007) also asked about condom use during the first face-to-face sexual encounter with an online partner specifically when engaging in different types of sexual behaviors. Of the women who answered this particular question only 57% had used a condom when engaging in vaginal sex ($n= 143$), only 14% had used a condom when engaging in oral sex ($n= 116$), and finally only 46% of females had used a condom when participating in anal sex with their online partner.

McFarlane, Kachur, Bull, and Rietmeijer (2004) found that in their sample of women who had sought sexual partners online ($n= 544$), only 8.4% had used a condom the last time they had participated in oral sex with an online partner, only 39.7% had used a condom the last time they participated in vaginal or anal sex with an online partner and that 34.4 % of the females in this sample reported having been drunk or high the last time they participated in sexual activity with an online partner. McFarlane et. al., also found that of the females who had sought sexual partners online only 74% had discussed each other's HIV status with their online sexual partners and only 73.1% had discussed sexually transmitted infections with their online partners.

Self-esteem

Rosenberg (1965) defined self-esteem as a positive or negative disposition aimed at oneself. Rosenberg (1965) differentiates between someone who thinks that she/he is not good (low self-esteem) and someone who thinks that she/he is very good (high self-esteem). Someone with low self-esteem is not content with their attributes, rejects

themselves and lacks respect for themselves (Rosenberg, 1965). However, someone who has high self-esteem does not consider themselves better than others, rather, that individual accepts his/her limitations and expects that she/he will improve on them.

There seems to be some research that indicates that low self-esteem can lead individuals to attempt risky behaviors. Sterk, Klein and Elifson (2004) found in their sample of 250 at-risk women that those who scored low on a measure of self-esteem held more negative attitudes towards condom use which in turn was negatively correlated with frequency of risky sex. These results, according to the authors, indicate that the more negative a woman's attitudes toward condom use the likelier it is that she would participate in risky sexual behavior. The authors defined risky sexual behavior as receiving or performing unprotected oral sex, vaginal and or anal sex with and/or without ejaculation, and swallowing semen within the past month. The women in this sample were chosen based on their history of substance use, income level, education, employment, past criminal behavior, access to needed medical care/insurance and area of residency in the city of Atlanta, Georgia.

In their study of sensation seeking, self-esteem and unprotected sex in college students, Gullette and Lyons (2006) found that overall, the students who scored low on a measure of self-esteem also reported more problems when using alcohol, such as driving under the influence, and less self-efficacy when it came to using a condom with their sexual partners.

Stress

Lazarus (1966) distinguished between the physiological and psychological effects of stressors. Lazarus declared that the physiological effects of stress deal with systems that are innate within the individual and have direct effects on the human body especially when dealing with unpleasant stimuli. When explaining the psychological aspect of stress, Lazarus (1966) goes on to state that what is considered noxious stimuli at the psychological level is different because it depends on how the stimuli is assessed by the individual therefore, if an object or situation is not seen as harmful a stress response will not be elicited.

Similarly Ter Kuile, Vigeveno and Laan (2007) differentiate between two types of stressors, one being an acute stressor and the other a chronic stressor. An acute stressor is looked at as being an immediate threat and is present for a short period of time, while a chronic stressor is a stressor that is present for a prolonged period of time. Research has mostly shown that women report higher levels of stress than men. Matud (2004) found that women reported higher levels of chronic and acute daily stressors and rated their life events as more negative than men.

A study was done by Mirowsky and Ross (1995) looking at 2,031 males and females with an average age of 43.5 years, 60.6 percent of which were married and 27.9 percent holding a bachelor's degree or higher. Results showed that women were generally more distressed in life than men, even after controlling for possible differences in response to stressors and differences in the expression of distress between the genders.

In order to investigate the effects of anxiety exposure and its effects on sexual arousal Palace and Gorzalka (1990) conducted a study which found that pre-exposure to anxiety provoking stimuli enhanced the rate and magnitude of genital arousal in their sample of sexually functional and dysfunctional women, when compared to their neutral condition.

The women that comprised the sexually dysfunctional group ($n= 16$) had been diagnosed with a sexual dysfunction due to psychological factors, while the sexually functional group ($n= 16$) had never received a diagnosis for sexual dysfunction and reported being satisfied with their current sexual functioning. Both groups of women were not on medication at the time of the study, identified as heterosexual and reported being sexually active. The anxiety provoking stimuli consisted of a three minute video portraying a possible amputation while the neutral condition consisted of a three minute video on travel. To stimulate sexual arousal the women in this sample were shown two three minute videos of a heterosexual couple engaging in foreplay followed by intercourse.

Hoon, Wincze, and Hoon (1977) exposed sexually functional women to an anxiety-evoking rather than relaxation-inducing film before exposing them to sexual stimuli and found that sexual arousal had increased in comparison to a second group of women who had been shown a sexually arousing film first accompanied by an anxiety producing film afterwards. These results seem to provide support for previous research which indicates that anxiety increases sexual arousal. The results of this particular study however are limited in their generalizability in that the sample included only 8 women.

One explanation for the increase in sexual arousal seen after exposure to anxiety provoking stimuli is cognitive mislabeling, where an individual misinterprets generalized physiological arousal as sexual arousal (Palace & Gorzalka, 1990). Schacter (1964) explains that if an individual finds him or herself in a state of physiological arousal and no obvious explanation exists as to why she/he is feeling so, the individual will label the arousal based on the thoughts immediately available.

Coping Style

The following two models have been proposed to help explain coping and its possible effects on an individual's mental health. The main effects model proposes that coping has consistent effects on an individual's mental health despite the cause of the stressor or the amount of stress that it causes the individual, while the interaction model posits that coping moderates the influence of the stressful situations depending on the type of stressor faced and the amount of stress it causes (Aldwin & Revenson, 1987).

Although ways of coping is usually broken down into many different categories or types, this thesis will focus on just two types, problem-focused coping and emotion-focused coping due to the fact that these two types of coping are what the Brief COPE scale (Carver, 1997) will be measuring. Problem-focused coping is an effort to remove a threatening event or diminish its impact, while emotion-focused coping is an effort to reduce the negative feelings that arise in response to a threat (Carver & Scheier, 1994). What determines an individual's way of coping with an event is still not clear, but there is evidence that shows that particular types of events can elicit particular types of coping strategies (Mattlin, Wethington, & Kessler, 1990).

Research has shown that compared to men, women tend to use a more emotion-focused style of coping. In a study exploring gender differences in stress and coping styles, Matud (2004) reported that women were more inclined to use a more emotion-focused style of coping than men, with women scoring significantly higher than men on emotional and avoidance styles of coping. In a study investigating the relationships between problem-solving, appraisal and coping, Brems and Johnson (1989) found that women reported having less confidence in their problem-solving abilities and tended to avoid problem-solving situations.

Emotion-focused coping has been linked with more adverse effects than problem-focused coping. In their study comparing depressed patients with non-depressed controls, Billings, Cronkite and Moos (1983) found that depressed individuals tended to use emotion-focused rather than problem-focused coping, had smaller numbers of relationships and had less supportive relationships with friends, family members, and co-workers. In another study using a sample of depressed individuals, Billings and Moos (1984) found that the coping responses of men and women were similar, and that the only difference was that women used emotional-discharge coping more often than men, which was associated with more severe impairment. Emotional-discharge coping is an indication of an emotion-focused style of coping in which the individual expresses any negative emotions verbally and behaviorally in an effort to reduce the negative consequences of a stressful event without directly dealing with the event itself (Billings & Moos, 1983).

The use of an emotion-focused style of coping has been explained by some researchers as resulting from gender role expectations. Because women are not encouraged to be autonomous, assertive or goal oriented (while men are) this makes it more difficult for women to take on a more action oriented problem-solving style of coping with their problems (Matud, 2004).

Research that has been done investigating coping and sexual behavior involving homosexual and bisexual men with AIDS has found for example, that participants who had engaged in unprotected anal intercourse (i.e. risky sexual behavior) during the last month reported using sexual activity to cope with stressful events more than those who had not engaged in unprotected anal intercourse over the past month (Folkman, Chesney, Pollack & Phillips, 1992). Folkman et al. (1992) also found that those who had engaged in unprotected anal sex were more likely to endorse statements such as “Kept feelings to myself”, “Tried to keep my feelings from interfering with other things too much” and “Tried to keep others from knowing how bad things are” as well as engaging in positive reappraisal, which the authors defined as being a form of cognitive restructuring which involves attending only to the positive aspects of a situation.

The presence of positive reappraisals and endorsement of statements whose main theme is the suppression of emotion lead the authors to hypothesize that it may facilitate avoidance of threatening thoughts or information having to do with the risk of HIV infection (Folkman et al., 1992), which would fall in line with emotion-focused style of coping since individuals are concentrating on addressing only the negative affect evoked by the possibility of HIV infection as opposed to focusing on relieving negative affect in

a more problem-focused way such as getting tested for HIV or avoiding engaging in risky sexual practices.

In a study exploring the effects of coping responses and social resources on stressful life events Billings and Moos (1981) found that the females in their sample, who avoided dealing with a stressor as an attempt at reducing their distress, scored higher on a measure of stress and had fewer social resources which negatively affected their overall level of functioning. Levels of functioning were assessed by having participants report indicators of depression, anxiety and physical symptomology (Billings & Moos, 1981).

Carver & Scheirer (1994) investigated the existence of differences in coping throughout different time periods in a stressful event. Specifically, the authors examined emotions and coping in a sample of 125 undergraduates two days before an exam (Time 1), five days after and 2 days before the exam grades were posted (Time 2) and 5 days after exam grades were posted (Time 3). The authors found that feelings of threat (anticipation of a negative outcome) lead to an increase in mental disengagement from Time 1 to Time 2 and held true at Time 3, with mental disengagement ranging from denial, turning to religion and alcohol use.

The results from Billings and Moos (1981) as well as the results from Carver & Scheirer (1994) indicate that coping which aims at diminishing only the negative feelings associated with an event (i.e. emotion-focused coping) is detrimental to the individual and can lead to the performance of unhealthy behaviors as well as psychological distress.

In a study analyzing the possible relationship between problematic internet use, stressful life events and coping style in Chinese college students Li, Wang & Wang

(2009) found that minor stressors such as academic, job-related, social stressors and daily hassles were more common with participants who were in the Generalized Problematic Internet Use (GPIU) group than in the non-problematic internet use group. The participants who qualified for the GPIU group scored a minimum of 5 out of 8 on the Internet Addiction Scale (Young, 1998 as cited in Li, et al., 2009) and a score of 73 or higher on the General Problematic Internet Use scale (Caplan, 2000 as cited in Li et al., 2009). The authors also found that participants who qualified for the GPIU group were more likely to avoid dealing with a stressor through fantasy and withdrawal, tended to engage more in self-blame and had higher rates of rationalization when it came to their lack of problem solving than compared to non-GPIU participants (Li et al., 2009).

Online Sexual Activity

Research detailing how much time is spent online for sexual and other purposes is scarce. However one of the first large scale studies examining how much of their time individuals spent online for sexual purposes was done by Cooper et al. (1999). This study included 9,177 participants, 91.7% of which indicated that they spent less than eleven hours per week on the internet engaged in sexual activities, and 46.6% reported spending less than one hour per week. The authors also found that 8% of their sample met the criteria for online sexual compulsivity as put forth by the Kalichman Sexual Compulsivity Scale (Kalichman & Rompa, 1995) and that these “sexually compulsive” participants spent more than 11 hours per week online engaged in sexual activity.

Results from this study also indicated that spending large amounts of time online participating in sexual activity had detrimental effects to the participants. Those who

reported spending more than 11 hours per week online engaging in sexual activity confessed to experiencing distress over their online sexual activity and the interference it was causing in their lives (Cooper et al., 1999).

In another major study of online sexual behavior ($N= 9265$), Cooper et al. (2000) arranged their sample into four groups, the nonsexually compulsive, moderate sexually compulsive, sexually compulsive and the cybersex compulsive groups. The authors found that women were overrepresented in their cybersex compulsive group making up 21% of the sample. Criteria for the cybersex compulsive group included scoring above a 29.93 on the Sexual Compulsivity Scale (i.e. 2 standard deviations above the mean, Kalichman et al., 1994) and spending more than 11 hours per week on online sexual activity.

Another group that was overrepresented in the cybersex compulsive category was homosexuals and bisexuals. This finding, along with the finding that women were also overrepresented in this category lead the authors to speculate that one possible explanation for these results is that the internet offers a safe place for disenfranchised groups to freely express their sexual identities and perform sexual behaviors that might otherwise be thought of as taboo (Cooper et al., 2000).

Outlet Preferences.

The data from Cooper et al. (1999) demonstrated female preferences towards particular modes of participating in online sexual activity. Forty-nine percent of the women surveyed by Cooper et al. (1999) indicated that they preferred chat rooms, while men preferred using websites. The authors interpreted these results as further evidence of

the perception that women prefer to connect with their partners and that men are more interested in visual stimulation.

Another study done by Cooper et al. (2000) supported the findings of Cooper et al. (1999). In this study the female participants that were dubbed sexually compulsive indicated they preferred to engage in sexual activity through chat rooms followed by adult websites and email. Delmonico and Miller (2003) also found similar results, which indicated that the sexually compulsive females in their sample adopted more social online sexual behavior with the significance of these results reaching the .001 level.

There is also evidence of women using dating websites and posting profiles on websites offering classified ads. In her study of personal and sexual safety with sexual partners met online, Padgett (2004) found that of the females who answered her survey ($N= 740$) the majority of them ($n= 568$) had met sexual partners online through personal ads posted on dating websites and online classified ads and had met those partners face to face. The sample included females whose age ranged from 18 to 70 years of age indicating that these two methods are used by a wide range of women.

McFarlane et al., (2004) found that browsing men's profiles and using dating and or matchmaking sites were the methods most preferred (combined 56.5 %) by the females in their sample ($N= 544$) whose average age was 32 years and were relatively ethnically diverse (81% White, 4.6% Black, 2.8% Hispanic, Other/No Answer 11.6%).

Seeking Sexual Partners.

Couch and Liamputtong (2008) conducted online interviews with 11 male participants and 4 female participants about their use of the internet to find sexual

partners. The authors discovered various reasons for using the internet to meet sexual partners (i.e. boredom, easy way to meet people, busy at work), the drawbacks (i.e. misleading profiles), how potential partners are screened (i.e. physical attractiveness, how close person lived to participant) and how participants decided to meet the individual/s they were communicating with in person (i.e. intellectual compatibility, ability to instigate a sexual relationship rapidly).

Padgett (2007) conducted a similar study with an all-female sample in order to further investigate the steps that females take in order to protect their physical and sexual safety when meeting online sexual partners in person. The author found that the females in her sample ($N= 568$) performed background checks on the individual/s (through an agency or through Google.com), checked for inconsistencies in the potential partners story, and often asked the potential partner to send a current picture prior to agreeing to meet in person. These participants also reported using e-mail to establish boundaries for their potential face-to-face encounter, expectations for what she wanted to happen, to ask about the potential partners' sexual history and sexual experience, and to discuss sexual safety (i.e. condom use).

Padgett (2007) also found that once the females had decided to meet their potential partner in person they took very specific steps to protect their physical safety. The author found that the females would decide to meet the person they were communicating with in a public place, during the day time and with their own transportation. The females would often make a call to a friend at some point during the

encounter to let the friend know they were alright; the females would bring a friend to sit and watch at a distance and or they would bring mace to ensure their safety.

CHAPTER 3

STATEMENT OF THE PROBLEM AND HYPOTHESES

If the models as proposed by Cooper (1998) and Young et al. (2000) are correct, then accessibility, anonymity, affordability, convenience and escape all contribute to the beginning of an online relationship. As Putnam (2000) explains, sexual relationships that have their beginnings online can be maintained through positive reinforcement, negative reinforcement and Classical conditioning (i.e. increases in sexual arousal, decreases in negative affect and physiological responses due to sexual arousal paired with computer use all contribute to online sexual activity).

Female participation in online sexual activity has been documented by researchers (Cooper et al., 1999; Cooper et al., 2000; Couch & Liamputtong, 2008; Delmonico & Burg; Albright, 2008; Griffiths, 2001), given this fact women are still often left out of the discourse surrounding this activity (Ferree, 2003). A need to investigate the factors affecting online sexual activity in females is clear given that women have been found to spend large amounts of time online on sexual pursuits (Cooper et al., 2000; Cooper et al., 1999) and that an increase in risky sexual behavior with online sexual partners has been documented (McKirnan, Houston, & Tolou-Shams, 2007; Adam, Murphy, & deWit, 2011; Halkitis & Parsons, 2003)

Literature has shown an association between sensation seeking and risky sexual behavior (Parent & Newman, 1999; Gullette & Lyons, 2006), that low self-esteem is associated with risky sexual behavior (Sterk et al., 2004; Gullette & Lyons, 2006), how

females are more impacted by stress (Mirosky & Ross, 1995) and how increased levels of stress/anxiety can increase sexual arousal (Palace & Gorzalka, 1990; Hoon et al., 1977).

Research has also shown that females tend to engage in an emotion-focused style of coping (Brems & Johnson, 1989; Billings & Moos, 1984) and that this particular style of coping is associated with more negative effects, specifically leading to an increase in risky sexual behavior (Folkman et al., 1992) and turning to the internet as a way to cope with stressors (Li et al., 2009). Using this information as its basis the following hypothesis is proposed: females who say yes to finding sexual partners online will score low on self-esteem, high on sensation seeking, report high levels of stress and an emotion-focused coping style.

Delmonico and Miller (2003) investigated possible differences in total time spent online and time spent online specifically for sexual purposes and found that the sexually compulsive females in their sample spent more time online in general and for sexual purposes than their non-sexually compulsive counterparts. It is based on this information that a secondary hypothesis is proposed: There will be a difference between females who have used the internet to find sexual partners and females who have not in the amount of hours spent online per week, specifically those who have used the internet to find sexual partners will spend a larger amount of time online per week than females who have not used the internet to find partners.

As evidenced by Cooper (1999) and Cooper et al., (2000) females have shown particular preferences in the medium used to secure sexual partners. This information serves as the predicate for the last hypothesis: Females who said yes to finding sexual

partners online will have particular preferences for which medium they use to obtain sexual partners. Based on past research, women will prefer to use chat rooms more than instant messaging, email, adult entertainment sites or other methods, including but not limited to, classifieds websites and dating sites (Padget, 2007; McFarlane, et al., 2004).

CHAPTER 4 METHODS

Participants

The sample ($N= 152$) was comprised entirely of females. The minimum age requirement for participation was 18 years of age for consent purposes. To further increase the anonymity of their responses (due to the sensitive nature of the topics) demographic information other than age and gender was not collected. Participants had access to the measures through a link posted on <http://psych.hanover.edu/research/exponnet.html>. This site is hosted by the psychology department at Hanover College located in Hanover, Indiana and provides access to online surveys that are part of research projects by others in the field of psychology. The link to the surveys was posted for 24 days (October 14, 2011 to November 8, 2011).

Procedure

Participants willingly selected to take part in this project. After clicking on the link posted on <http://psych.hanover.edu/research/exponnet.html> participants were taken to an account created on surveymonkey.com where the relevant measures were posted. Participants' responses were gathered and organized into an SPSS data file, done completely by surveymonkey.com's software. The surveymonkey.com account was password protected by a password created by the primary researcher, no identifying information was sought from participants other than their gender, and to further ensure

participants' privacy the surveymonkey.com account was instructed not to collect participant IP addresses.

To ensure that only women participated, the link on the Hanover website was titled "Women and Sex" and in parentheses included the words (Female Participants Only). Participants were asked to indicate their gender during the beginning and internet use portions of the survey. A response of "Yes" to the question "Are you female?" was required in order to move forward in the survey. Participants who answered "No" were directed to a disqualification page which helped the participant exit the survey. Individuals who consented, by indicating that they were female and 18 years of age were directed to the survey questions. After finishing the survey a debriefing form appeared with information about the purpose of the study, whom to contact if the participant had any questions and contact information for hotlines, as well as a link to a site providing information about sexual/reproductive health.

Measures

The scale that was used to assess self-esteem was the Rosenberg Self-Esteem Scale (see appendix A). This scale consists of ten items using Likert-type responses ranging from strongly agree to strongly disagree (Gullette & Lyons, 2006). Scores for this scale range from a low of ten to a high of 40, with scores above 20 indicating high self-esteem (Gullette & Lyons, 2006). Test-retest reliability reportedly ranges from .82 to .88 (Gullette & Lyons, 2006).

In order to assess sexual sensation seeking the Sexual Sensation Seeking Scale was used (Kalichman et al., 1994; see appendix B). This scale contains 9 items with

Likert-type responses ranging from not at all like me to very much like me. The minimum score is a score of 9 and the maximum score a 36, with a score of 18 and higher indicating high sensation seeking behavior. This scale has been validated on a sample of homosexual males ($N= 106$) resulting in internal consistency of .75 and test re-test reliability of .78 ($n= 36$). A revised version of this scale was also later validated on a heterosexual sample, both male ($n= 60$) and female ($n= 98$) showing internal consistency at .79 and a three month test-retest reliability of .69 ($n= 195$ males, Kalichman & Rompa, 1995).

Coping style was assessed using the Brief COPE scale by Carver (1997, see appendix C). This scale is made up of 14 different subscales with two items each and is based on the larger COPE scale developed by Carver, Scheier & Weintraub (1989) which measures problem-focused and emotion-focused coping styles. The measure was validated on a sample of participants who were survivors of Hurricane Andrew. Data collection occurred three ($N= 168$), six ($N= 124$) and twelve ($N= 126$) months after the hurricane. The initial sample was made up of mostly white participants (40%) and women (66%). Reliability for the subscales ranged from .50 to .90.

To measure stress the four item shortened version of Cohen and Williamson's Perceived Stress Scale (PSS4, 1988, see appendix D) was used. The scale was created to measure how erratic, unruly and burdensome individuals find their lives to be across a one month period. In terms of reliability, the scale's Cronbach's alpha was .60. Cohen and Williamson (1988) also report that the PSS4 correlated with other measures of stress

which included stress within the past week ($r=.29$), stress within the past year ($r=.23$), stressful life events ($r=.28$) and job stress ($r=.14$) all significant at a .001 level.

The measure used to assess time spent online and inclination to use the internet for sexual partners is based on patterns of use that had been found in previous research and questions asked by previous researchers in their experiments (see appendix E). The questions involve asking participants whether they have ever used the internet for sex, how many hours they spend online per week, if they have ever used the internet to seek sex and if so to indicate which medium/s they used and which they prefer to use (i.e. instant messaging, chat rooms, email, websites or other) as well as the amount of hours spent online for sexual activity. Questions were formulated based on research showing particular preferences by women (discussed in the “Online Preferences” section of this paper) when using the internet for sexual activity, as was found by Cooper et al. (1999) and Cooper et al. (2000) and from the Internet Sex Screening Test by Delmonico (2000).

CHAPTER 5

RESULTS

The original sample consisted of 234 participants. There were 82 cases in which large amounts of data were missing particularly in the internet use portions and after filling out the self-esteem portion of the survey. After those cases with the majority of the data missing were eliminated there were 152 cases left. The total sample then consisted of 152 participants who fell into one of two categories: those who responded “Yes” ($n= 24$) when asked if they had ever used the internet to find sexual partners and those who responded “No” ($n= 128$).

An independent samples t-test was conducted for the first hypothesis in which I posited that females who say yes to finding sexual partners online will score low on self-esteem, high on sensation seeking, report high levels of stress and an emotion-focused coping style. Results showed that for most of the variables being examined there were no significant differences in scores. Participant’s level of self-esteem did not differ between women who had used the internet to find sexual partners ($M= 21.62$, $SD = 5.76$) and those who had not ($M= 19.46$, $SD= 5.47$), $t(148) = 1.75$, $p = .08$, 95% CI [-.274, 4.58], overall both groups of participants had relatively high self-esteem.

Regarding coping style, participants’ scores did not differ significantly between groups of females who had sought sexual partners online and those who did not for most of the types of coping except for their use of religion and self-blame. Participants who had gone online to find sexual partners were less likely to use religion ($M= 2.95$, $SD=$

1.33), $t(147) = -2.32, p = .02, 95\% \text{ CI} [-1.40, -.113]$ and more likely to engage in self-blame ($M = 4.87, SD = 1.15$) than those who did not ($M = 3.72, SD = 1.49$ and $M = 4.07, SD = 1.12$), $t(148) = 3.19, p = .002, 95\% \text{ CI} [.306, 1.30]$.

Results for levels of stress reported by participants were also non-significant between those who had used the internet for sexual partners ($M = 11.79, SD = 3.16$) and those who had not ($M = 11.37, SD = 3.32$), $t(147) = .565, p = .573, 95\% \text{ CI} [-1.03, 1.86]$. Results for both groups of participants indicated relatively high levels of stress.

It was also found that female participants who had gone online to seek sexual partners scored higher on the measure of sexual sensation-seeking ($M = 23.91, SD = 6.01$) than those who had not ($M = 20.68, SD = 4.16$), $t(27.309) = 2.52, p = .018, 95\% \text{ CI} [.602, 5.86]$. Even though a significant difference was found; overall both groups of participants' scores fell in the mid-range of this measure. Levene's test for equality of variances was significant ($F = 7.556, p = .007$) so the statistics for equality of variance not assumed were used for the sexual sensation-seeking scale. Based on the overall results hypothesis 1 was not supported except for the differences in scores on the sexual sensation-seeking scale and the two subscales on the Brief COPE as reported above.

Upon closer inspection it was discovered that the format for the Brief COPE had been mistakenly altered. The answer choices provided by myself to participants were different than those in the original measure, however, reliability information for the new format that was used for this project revealed acceptable reliability statistics for the two subscales which resulted in significant differences, with the religion subscale producing a

Cronbach's alpha of .862 and the self-blame subscale producing a Cronbach's alpha of .796.

Data indicated a significant difference between groups on the amount of time spent online per week. Females who use the internet for sexual partners spent larger amounts of time per week ($M= 27.58, SD= 17.6$) than those who did not ($M= 19.85, SD= 14.05$) $t(147) = 2.4, p = .018, 95\% CI [1.36, 14.1]$. Although participants were asked how many hours per week they spent online seeking sexual partners, upon analysis data revealed the existence of 3 cases with outlying scores (5, 8 and 15 hours per week) with most of the scores falling between zero and two hours per week. The presence of these outlying scores therefore makes the mean (1.46) and standard deviation (3.44) for this question misleading.

A closer look at the data reveals three possible types of respondents to the question of how many hours are spent online per week seeking sexual partners. For the majority (Type 1 Non-Active-, $n= 15$) the average number of hours spent per week was zero, indicating that although these participants had answered "Yes" when asked if they had ever sought sexual partners online they were not doing so at the time they answered the survey. The next group of respondents (Type 2 Active-Moderates, $n= 6$) indicated spending an average of 1.18 hours per week while the last group (Type 3 Active-, $n= 3$) reported spending an average of 9.33 hours per week.

Regarding the last hypothesis, data revealed results disparate to what previous research had revealed. The data showed that of the women who answered "Yes" to searching for sexual partners online, 37.5 percent preferred instant messaging over e-mail

(29.2%), chat rooms (2%) and adult entertainment sites (16.7%). Interestingly the overwhelming majority chose the “Other” option (66.7%).

CHAPTER 6

DISCUSSION

Partial support was found for hypothesis number one with results showing that females who have gone online to seek sexual partners differed significantly in their scores on a measure of sexual sensation-seeking than females who have not. Based on the research done with other populations it seems that sexual sensation-seeking might be a primary contributor to seeking sexual gratification in general and sexual partners specifically through the internet since this behavior has been observed in multiple populations of all ages, socioeconomic backgrounds and education levels, including heterosexual and homosexual men and women, college students as well as HIV-positive and HIV-negative homosexual men (Cooper et. al (2000); Perry et al., (2007); Coleman et. al (2010).

The other significant differences found between the two groups of females are the differences in using religion and self-blame to cope with stressful events. These results are partially supportive of the hypothesis that was posited in that self-blame falls under the emotion-focused style that was predicted to be most common among women who go online to find sexual partners and has been found to be more commonly used by the female gender by previous research. The finding that users are less apt to use Religion to cope (which also falls in to the emotion-focused style of coping category) however, would seem to contradict the support for hypothesis 1 based on the Self-blame subscale difference.

Support for hypothesis number two was also found resulting in a significant difference in the amount of time that both groups of females spent online. Women who have used the internet for sex spend more time online for general purposes (i.e. shopping, researching, etc.) than women who have not, however, it is not possible to determine whether their increased use of the internet leads them to search for sex online or if seeking sexual partners online leads the individual to spend more time online in general.

Regarding the participants' answer to the question "How many hours per week do you spend online seeking sexual partners?" a look at the individual scores reveals that it is possible that responses to this question came from different groups of participants, those who had sought online partners in the past but were no longer doing so at the time they took the survey, which explains why most answered yes to having sought online partners but reported spending zero hours per week seeking them, and those who are currently seeking sexual partners, which explains the remaining scores and outliers.

A look at the remaining scores and outliers reveal that of the participants who are currently spending time seeking sexual partners online, the amount of time spent ranges from what could be deemed as low (less than 5 hours/week, $n= 21$), moderate (5-10 hours/week, $n= 2$) and high (11-more hours/week, $n= 1$) resembling the results of Cooper et al. (1999), Cooper et al., (2000) and Delmonico and Miller (2003) whose samples include males and females.

Regarding the final hypothesis most participants indicated that they preferred to use a method other than instant messaging, e-mail, chat rooms, or adult entertainment sites to seek for sexual partners. The "Other" option offered in parentheses examples of

what could fall into that category with the websites craigslist.org (a site presenting classifieds and forums) and plentyoffish.com (a free internet dating site) listed to illustrate what could fit into that category.

In comparison to past research looking at the preferred medium for accessing partners online, the results from this group of participants differs. Due to the lack of demographic information for this sample a comparison based on that information makes it difficult to determine if for example, age, socioeconomic status, education level, ethnicity or occupation might have affected the results.

Implications

The need for more research on this subject with this specific population is clear. With the internet being an increasing channel for individuals to search for sexual as well as romantic relationships, the need will eventually arise for a clearer understanding of the types of individuals more apt to choose this route when searching for a relationship.

One very positive effect has been identified and should be explored further by researchers: as Cooper et. al., (2000) points out, the internet provides marginalized groups with shelter from negative judgment because of their sexual preferences and or behaviors. Women have without a doubt been victims of sexual restraint due to societal standards therefore; it would be no surprise that any outlet allowing women the chance to freely express their sexual desires would be an attractive option.

The point made by Cooper et. al., (2000) falls in line with most of the results of this thesis; the majority of the females in this sample did not differ in the variables being examined. Results showed that both groups of women had high self-esteem, reported

experiencing similar levels of stress and did not differ in 12 out of the 14 subscales of the Brief COPE measure.

These results point to the possibility that one of the main reasons the women in this sample might have turned to the internet for sexual partners is because it allows them the freedom to explore their sexual desires in a way that shelters them from the judgment that they would or might have already experienced with offline partners, not because they differ in any inherent way from women who have not sought sexual partners online.

Limitations

The lack of demographic information for this sample makes the generalizability of these results difficult. If demographic information other than gender and age would have been collected further similarities and/or differences between these two groups of females could have possibly been discovered.

The small total and group sample sizes are another factor that could have impacted and have an effect on the generalizability of the results. Another component that could have influenced the results is the fact that participants were self-selected, making them possibly more apt to be heavier users of the internet and more interested in sexual pursuits.

Another bias possibly present here, is social desirability. The type of questions asked to participants are undoubtedly sensitive in nature and could have caused them to, perhaps; underestimate their sexual or coping tendencies, levels of stress or frequency of internet use.

The lack of a valid measure used to inquire about specific online behavior for individuals in general and women specifically, is also an issue that should be addressed by future researchers taking into account any demographic differences that may arise from further investigation into the topic. The answer choices for the internet use measure used here were based on questions asked by researchers over a decade ago, with the rapid changes frequently occurring in technology the possibility that the choices given when asking participants which medium they prefer when accessing sexual partners are most likely outdated. The measure also does not differentiate between going online to seek a specific partner, various partners or partners that have or might be met in person.

One last limitation that could have produced interesting results is the rate at which participants chose the “Other” option when asked what their preferred medium of securing sexual partners was. The realization came after the fact that if participants would have been given the choice of typing in their preferred “other” options the results could have provided new insights into mediums of securing sexual partners online that had not been thought of or explored by past research.

REFERENCES

- Adam, P.C.G, Murphy, D.A., & de Wit, J.B.F. (2011). When do online sexual fantasies become reality? The contribution of erotic chatting via the internet to sexual risk-taking in gay and other men who have sex with men. *Health Education Research*, 26 (3), 506-515. doi:10.1093/her/cyq085
- Albright, J.M. (2008). Sex in America online: an exploration of sex, marital status, and sexual identity in internet sex seeking and its impacts. *Journal of Sex Research*, 45(2), 175-186. doi:10.1080/00224490801987481
- Aldwin, C.M. & Revenson, T.A. (1987). Does coping help? a reexamination of the relation between coping and mental health. *Journal of Personality and Social Psychology*, 53(2), 337-348. doi: 10.1037/0022-3514.53.2.337
- Billings, A.G., Cronkite, R.C., Moos, R.H. (1983). Social-environmental factors in unipolar depression: comparisons of depressed patients and nondepressed controls. *Journal of Abnormal Psychology*, 92(2), 119-133. doi: 10.1037/0021-843X.92.2.119
- Billings, A.G., & Moos, R.H. (1981). The role of coping responses and social resources in attenuating the stress of life events. *Journal of Behavioral Medicine*, 4(2), 139-157, doi: 10.1007/BF00844267
- Billings, A.G., & Moos, R.H. (1984). Coping, stress, and social resources among adults with unipolar depression. *Journal of Personality and Social Psychology*. 46(4), 877-891. doi: 10.1037/0022-3514.46.4.877
- Brems, C. & Johnson, M.E. (1989). Problem-solving appraisal and coping style: the

influence of sex-role orientation and gender. *The Journal of Psychology*, 123(2), 187-194.

Carver, C. S. (1997). You want to measure coping but your protocol's too long: consider the brief cope. *International Journal of Behavioral Medicine*, 4(1), 92-100. doi: 10.1207/s15327558ijbm0401_6

Carver, C.S. & Scheier, M.F. (1994). Situational coping and coping dispositions in a stressful transaction, *Journal of Personality and Social Psychology*, 66(1), 184-195. doi: 10.1037/0022-3514.66.1.184

Carver, C.S, Scheier, M.F., & Weintraub, J.K. (1989). Assessing coping strategies: a theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267-283. doi: 10.1037/0022-3514.56.2.267

Cohen, S. & Williamson, G.M. (1988). Perceived stress in a probability sample of the united states. In S. Sacapan & S. Oskamp (Eds), *Social Psychology of Health* (31-67). California: SagePublications Inc.

Coleman, E., Horbath, K.J., Miner, M., Ross, M. W., Oakes, M. & Rosser, S. B. R. (2010). Compulsive sexual behavior and risk for unsafe sex among internet using men who have sex with men, *Archives of Sexual Behavior*, 39, 1045-1053. doi: 10.1007/s10508-009-9507-5

Cooper, A. (1998). Sexuality and the internet: surfing into the new millennium. *Cyberpsychology & Behavior*, 1(2), 187-193. doi:10.1089/cpb.1998.1.187

Cooper, A., Delmonico, D.L., & Burg, R. (2000). Cybersex users, abusers, and compulsives: new findings and implications. *Sexual Addiction & Compulsivity*, 7, 5-29. doi:10.1080/10720160008400205

- Cooper, A., Griffin-Shelley, E., Delmonico, D.L., & Mathy, R.M. (2001). Online sexual problems: Assessment and predictive variables. *Sexual Addiction and Compulsivity*, 8, 267-285. doi: 10.1080/107201601753459964
- Cooper, A., Scherer, C.R., Boies, S.C., & Gordon, B.L. (1999). Sexuality on the internet: from sexual exploration to pathological expression. *Professional Psychology: Research and Practice*, 30(2), 154-164. doi: 10.1037/0735-7028.30.2.154
- Couch, D., & Liamputtong, P. (2008). Online dating and mating: the use of the internet to meet sexual partners. *Qualitative Health Research*, 18, 268-279.
doi:10.1177/1049732307312832
- Delmonico, D.L. (2000). The internet sex screening test [webpage]. Retrieved from <http://www.sexhelp.com/isst.cfm>
- Delmonico, D.L., Miller, J.A. (2003). The internet sex screening test: a comparison of sexual compulsives versus non-sexual compulsives. *Sexual and Relationship Therapy*, 18(3), 261-276. doi:10.1080/1468199031000153900
- Ferree, M.C. (2003). Women and the web: cybersex activity and implications. *Sexual and Relationship Therapy*, 18(3), 385-393. doi: 10.1080/1468199031000153973
- Folkman, S., Chesney, M.A., Pollack, L. & Phillips, C. (1992). Stress, coping, and high-risk sexual behavior. *Health Psychology*, 11(4), 218-222. doi: 10.1037/0278-6133.11.4.21
- Griffiths, M. (2001). Sex on the internet: observations and implications for internet sex addiction. *The Journal of Sex Research*, 38(4), 333-342. doi: 10.1080/00224490109552104
- Gullete, D.L., & Lyons, M.A. (2006). Sensation seeking, self-esteem and unprotected sex

in college students. *Journal of the Association of Nurses in AIDS Care*. 17(5), 23-31. doi:10.1016/j.jana.2006.07.001

Halkitis, P.N., & Parsons, J.T. (2003). Intentional unsafe sex (barebacking) among hiv-positive gay men who seek sexual partners on the internet. *AIDS CARE*, 15(3), 367-378. doi:10.1080/0954012031000105423

Hergenhahn, B.R., & Olson, M.H. (2005). Burrhus frederic skinner. (7th Eds), *An Introduction to Theories of Learning* (pp.76-129). Upper Saddle River, New Jersey: Pearson Prentice Hall.

Hergenhahn, B.R., & Olson, M.H. (2005). Ivan petrovich pavlov. (7th Eds), *An Introduction to Theories of Learning* (pp.169-210). Upper Saddle River, New Jersey: Pearson Prentice Hall.

Hoon, P.W., Wincze, J.P., & Hoon, E.F. (1977). A test of reciprocal inhibition: are anxiety and sexual arousal in women mutually inhibitory? *Journal of Abnormal Psychology*, 86(1),65-74. doi:10.1037/0021-843X.86.1.65

Kalichman, S.C, Johnson, J.R., Adair, V., Rompa, D., Multhauf, K. & Kelly, J.A. (1994). Sexual sensation seeking: scale development and predicting aids-risk behavior among homosexually active men. *Journal of Personality Assessment*, 62(3), 385-397. doi: 10.1207/s15327752jpa6503_16

Kalichman, S.C., & Rompa, D. (1995). Sexual sensation seeking and sexual compulsivity scales: reliability, validity, and predicting hiv risk behavior. *Journal of Personality Assessment*, 65(3), 586-601. doi: 10.1207/s15327752jpa6503_16

Lazarus, R.S. (1966). Other issues in stress theory and research. In Garnezy, N., Harlow, H.F., Jones, L.V. & Stevenson, H.W. (Eds.) *Psychological Stress and the Coping*

- Process (pp. 391-425). New York: McGraw-Hill Inc.
- Li, H., Wang, J. & Wang, L. (2009). A survey on the generalized problematic internet use in chinese college students and its relations to stressful life events and coping style. *International Journal of Mental Health and Addiction*, 7(2), 333-346. doi: 0.1007/s11469-008-9162-4
- Liau, A., Millett, G., & Marks, G. (2006). Meta-analytic examination of online sex-seeking and sexual risk behavior among men who have sex with men. *Sexually Transmitted Diseases*, 33(9), 576-584. doi: 10.1097/01.olq.0000204710.35332.c5
- Mattlin, J. A., Wethington, E., & Kessler, R. C. (1990). Situational determinants of coping and coping effectiveness. *Journal of Health and Social Behavior*, 31(1), 103-122. doi: 10.2307/2137048
- Matud, M.P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, 37, 1401-1415. doi:10.1016/j.paid.2004.01.010
- McFarlane, M., Kachur, R., Bull, S. & Rietmeijer, C. (2004). Women, the internet, and sexually transmitted infections. *Journal of Women's Health*, 13, 689-694. doi: 10.1089/jwh.2004.13.689
- McKenna, K.Y.A., Green, A.S., & Smith, P.K. (2001). Demarginalizing the sexual self. *The Journal of Sex Research*, 38(4), 302-311. doi: 10.1080/00224490109552101
- McKirnan, D., Houston, E., & Tolou-Shams, M. (2007). Is the web the culprit? cognitive escape and internet sexual risk among gay and bisexual men. *AIDS and Behavior*, 11, 151-160. doi: 10.1007/s10461-006-9084-8
- Mirowsky, J., & Ross, C. E. (1995). Sex differences in distress: real or artifact? *American Sociological Review*, 60(3), 449-468. doi:10.2307/2096424

- Morokoff, P.J., & Gilliland, R. (1993). Stress, sexual functioning, and marital satisfaction. *The Journal of Sex Research, 30*(1), 43-53.
doi:10.1080/00224499309551677
- Oliver, M.B., & Hyde, J.S. (1993). Gender differences in sexuality: a meta-analysis. *Psychological Bulletin, 114*(1), 29-51. doi:10.1037/0033-2909.114.1.29
- Padgett, P.M. (2007). Personal safety and sexual safety for women using online personal ads. *Sexuality Research and Social Policy, 4*(2), 27-37. doi :
10.1525/srsp.2007.4.2.27
- Palace, E.M., & Gorzalka, B.B. (1990). The enhancing effects of anxiety on arousal in sexually dysfunctional and functional women. *Journal of Abnormal Psychology, 99*(4), 403-411. doi:10.1037/0021-843X.99.4.403
- Parent, E.C., & Newman, D.L. (1999). The role of sensation-seeking in alcohol use and risk-taking behavior among college women. *Journal of Alcohol and Drug Education, 44*(2), 12-28.
- Perry, M., Accordino, M.P., & Hewes, R.L. (2007). An investigation of internet use, sexual and nonsexual sensation seeking, and sexual compulsivity among college students. *Sexual Addiction and Compulsivity, 14*, 321-335.
doi:10.1080/10720160701719304
- Putnam, D.E. (2000). Initiation and maintenance of online sexual compulsivity: implications for assessment and treatment. *CyberPsychology & Behavior, 3*(4), 553-563. doi: 10.1089/109493100420160
- Ropelato, J. (n.d.). Internet pornography statistics. Retrieved from
<http://internet-filter-review.toptenreviews.com/internet-pornographystatistics.html>

- Rosenberg, M. (1965). Measurement of self-esteem. *Society and the Adolescent Self-image* (Rev.ed., pp. 16-36) Connecticut: Princeton University Press.
- Schacter, S. (1964). The interaction of cognitive and physiological determinants of emotional states. In Berkowitz, L. (ed.). *Advances in Experimental Social Psychology*, Vol 1, New York: Academic Press.
- Seal, A., Minichiello, V., & Omodei, M. (1997). Young women's sexual risk taking behavior: re-visiting the influences of sexual self-efficacy and sexual self-esteem. *International Journal of STD & AIDS*, 8, 159-165. doi: 10.1258/0956462971919822
- Sterk, C.E., Klein, H.K. & Elifson, K.W. (2004). Predictors of condom-related attitudes among at-risk women. *Journal of Women's Health*, 13(6), 676-688. doi: 10.1089/jwh.2004.13.676
- Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behavior*, 7(3), 321-326. doi:10.1089/1094931041291295
- Ter Kuile, M., Vigeveno, D., & Laan, E. (2007). Preliminary evidence that acute and chronic daily psychological stress affect sexual arousal in sexually functional women. *Behaviour Research and Therapy*, 45, 2078-2089. doi:10.1016/j.brat.2007.03.006
- Wells, B.E., & Twenge, J.M. (2005). Changes in young people's sexual behavior and attitudes, 1943-1999: a cross-temporal meta-analysis. *Review of General Psychology*, 9(3), 249-261. doi:10.1037/1089-2680.9.3.249
- Young, K.S., Griffin-Shelley, E., Cooper, A., O'mara, J., & Buchanan, J. (2000). Online infidelity: A new dimension in couple relationships with implications for evaluation and treatment. *Sexual Addiction and Compulsivity*, 7, 59-74. doi:

10.1080/10720160008400207

APPENDIX A

Rosenberg Self-Esteem Scale

Below is a list of statements dealing with your general feelings about yourself. Choose how much you agree with each statement.

1.	On the whole, I am satisfied with myself.	Strongly Agree	Agree	Disagree	Strongly Disagree
2.*	At times, I think I am no good at all.	Strongly Agree	Agree	Disagree	Strongly Disagree
3.	I feel that I have a number of good qualities.	Strongly Agree	Agree	Disagree	Strongly Disagree
4.	I am able to do things as well as most other people.	Strongly Agree	Agree	Disagree	Strongly Disagree
5.*	I feel I do not have much to be proud of.	Strongly Agree	Agree	Disagree	Strongly Disagree
6.*	I certainly feel useless at times.	Strongly Agree	Agree	Disagree	Strongly Disagree
7.	I feel that I'm a person of worth, at least on an equal plane with others.	Strongly Agree	Agree	Disagree	Strongly Disagree
8.*	I wish I could have more respect for myself.	Strongly Agree	Agree	Disagree	Strongly Disagree
9.*	All in all, I am inclined to feel that I am a failure.	Strongly Agree	Agree	Disagree	Strongly Disagree

- | | | | | | |
|-----|---|----------------|-------|----------|-------------------|
| 10. | I take a positive attitude toward myself. | Strongly Agree | Agree | Disagree | Strongly Disagree |
|-----|---|----------------|-------|----------|-------------------|

APPENDIX B

Sexual Sensation Seeking Scale

Please indicate how much you identify with each of the following statements

I like wild “uninhibited” sexual encounters.

Not at all like me Not very much like me Somewhat like me Very much like me

I have made promises I did not mean to keep to get a person to have sex with me.

Not at all like me Not very much like me Somewhat like me Very much like me

I have felt curious about having anal intercourse without a condom

Not at all like me Not very much like me Somewhat like me Very much like me

I enjoy the company of “sensual” people.

Not at all like me Not very much like me Somewhat like me Very much like me

I enjoy watching “X-rated” videos.

Not at all like me Not very much like me Somewhat like me Very much like me

I have said things that were not exactly true to get a person to have sex with me.

Not at all like me Not very much like me Somewhat like me Very much like me

I am interested in trying out new sensual experiences.

Not at all like me Not very much like me Somewhat like me Very much like me

I feel like exploring my sexuality.

Not at all like me Not very much like me Somewhat like me Very much like me

I like new and exciting sexual experiences and sensations

Not at all like me Not very much like me Somewhat like me Very much like me

APPENDIX C

Brief COPE Scale

The following questions are about how you think and act when you experience a stressful event.

1. I concentrate my efforts on doing something about the situation I'm in.

I don't do this at all I do this somewhat I do this a lot

2. I take action to try to make the situation better.

I don't do this at all I do this somewhat I do this a lot

3. I try to come up with a strategy about what to do.

I don't do this at all I do this somewhat I do this a lot

4. I think hard about what steps to take.

I don't do this at all I do this somewhat I do this a lot

5. I try to see it in a different light, to make it seem more positive.

I don't do this at all I do this somewhat I do this a lot

6. I look for something good in what is happening.

I don't do this at all I do this somewhat I do this a lot

7. I accept the reality of the fact that it has happened.

I don't do this at all I do this somewhat I do this a lot

8. I learn to live with it.

I don't do this at all I do this somewhat I do this a lot

9. I make jokes about it.

I don't do this at all I do this somewhat I do this a lot

10. I make fun of the situation.

I don't do this at all I do this somewhat I do this a lot

11. I try to find comfort in my religion or spiritual beliefs.

I don't do this at all I do this somewhat I do this a lot

12. I pray or meditate.

I don't do this at all I do this somewhat I do this a lot

13. I get emotional support from others.

I don't do this at all I do this somewhat I do this a lot

14. I get comfort and understanding from someone.

I don't do this at all I do this somewhat I do this a lot

15. I try to get advice or help from other people about what to do.

I don't do this at all I do this somewhat I do this a lot

16. I get help and advice from other people.

I don't do this at all I do this somewhat I do this a lot

17. I turn to work or other activities to take my mind off things.

I don't do this at all I do this somewhat I do this a lot

18. I do something to think about it less, such as go to movies, watch TV, read, daydream, sleep, or shop.

I don't do this at all I do this somewhat I do this a lot

19. I say to myself "this isn't real".

I don't do this at all I do this somewhat I do this a lot

20. I refuse to believe that it has happened

I don't do this at all I do this somewhat I do this a lot

21. I say things to let my unpleasant feelings escape.

I don't do this at all I do this somewhat I do this a lot

22. I express my negative feelings

I don't do this at all I do this somewhat I do this a lot

23. I use alcohol or other drugs to make myself feel better.

I don't do this at all I do this somewhat I do this a lot

24. I use alcohol or other drugs to help me get through it.

I don't do this at all I do this somewhat I do this a lot

25. I give up trying to deal with it.

I don't do this at all I do this somewhat I do this a lot

26. I give up the attempt to cope.

I don't do this at all I do this somewhat I do this a lot

27. I criticize myself.

I don't do this at all I do this somewhat I do this a lot

28. I blame myself for things that happened.

I don't do this at all I do this somewhat I do this a lot

APPENDIX D

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate *how often* you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to count up the number of times you felt a particular way; rather indicate the alternative that seems like a reasonable estimate.

In the last month, how often have you felt that you were unable to control the important things in your life?

0. Never
1. Almost never
2. Sometimes
3. Fairly often
4. Very often

In the last month, how often have you felt confident about your ability to handle your personal problems?

0. Never
1. Almost never
2. Sometimes
3. Fairly often
4. Very often

In the last month, how often have you felt that things were going your way?

0. Never
1. Almost never
2. Sometimes
3. Fairly often
4. Very often

In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

0. Never
1. Almost never

2. Sometimes
3. Fairly often
4. Very often

APPENDIX E**Internet Use Questionnaire**

What is your gender? _____

How many hours per week do you generally spend online (i.e. shopping, researching, etc.)? _____

Have you ever used the internet to seek a sexual partner/s? (Include partners that were reimbursed for engaging in sexual activity and or any partner/s that you found online and have had sex with in person) _____

If yes, indicate which of the following you have used to meet or engage in sexual activity with that partner or partners (you are allowed to choose more than one, if applicable):

Instant messaging_____

E-mail_____

Chat Rooms_____

Adult Entertainment sites_____

Other (i.e. Craigslist.org, Plentyoffish.com)_____

Which method do you prefer to use when seeking a sexual partner/s?_____

How many hours per week do you spend online seeking a sexual partner/s?_____

APPENDIX F

INFORMED CONSENT

HUMBOLDT STATE UNIVERSITY

CONSENT TO ACT AS A RESEARCH SUBJECT

The following survey will take place online from October, 2011 until November, 2011 and will take approximately 25 to 35 minutes to complete. I will be asked to answer questions about my self-esteem, stress, how I deal with stressful events and to answer questions about my sexual behavior and internet use. There is a risk that by answering these questions I might experience some distressing feelings (for example, shame, embarrassment, sadness) and or thoughts (for example, relive past or current stressful experiences).

If I experience any discomfort due to the nature of the questions in the survey and would like assistance I can refer to the following national hotline numbers which are toll-free and available 24 hours a day 7 days a week 1-800-SUICIDE (784-2433) or 1-800-273-TALK (8255). I can also refer to the following information on available resources for assistance with any questions I might have about sexual/reproductive health:
http://sfsi.org/wiki/Main_Page

This research is being conducted in order to obtain more information on how females cope with stress and the effects stress has on their self-esteem, sexual behavior and internet use. Although there are no direct benefits to me, the answers I provide might produce valuable information about the way women deal with stress and how it affects self-esteem, sexual behavior and internet use.

By choosing yes I agree to participate in this study, confirm that I am 18 years of age or older, agree that I understand my participation is completely voluntary, I will not be compensated in any way for my participation and understand I may decline to enter this study or withdraw from it at any time without penalty. No identifying information will be collected and all answers will be kept confidential. For specific information about how this will be done I can visit the [surveymonkey.com](http://www.surveymonkey.com) page "Are my survey responses anonymous and secure?" at http://help.surveymonkey.com/app/answers/detail/a_id/3950. I can also find more general information about security on [surveymonkey.com's](http://www.surveymonkey.com/privacypolicy.aspx) privacy policy page at <http://www.surveymonkey.com/privacypolicy.aspx>.

The surveymonkey.com account to which the responses will be saved will remain active five years after the study has ended. This account is password protected and can only be accessed by the main researcher, Anabel Patino and the supervising faculty member Dr. Gregg Gold.

If I have any questions regarding the survey and/or my participation I can contact Anabel Patino at (530) 530-329-4189 or anabel_patino@yahoo.com. The faculty advisor is also available, Dr. Gregg Gold at (707) 826-3740 or gjg14@humboldt.e

APPENDIX G

Debriefing Form

Female Use of the Internet for Sexual Encounters Self-esteem, Sexual Sensation Seeking, Stress And Coping Style

The purpose of the study you just completed is to explore the possible relationship between self-esteem, sexual sensation-seeking, stress, coping style and internet sexual activity. The intent of this study is to investigate whether these variables help to predict whether a female will go online to seek sexual partners.

Your responses to the survey in this study are confidential, should you have any questions please contact me, Anabel Patino at (530)329-4189 or at anabel_patino@yahoo.com. You can also contact my thesis committee chair Dr. Gregg Gold at (707) 827-3740 or at gjg14@humboldt.edu.

If you experienced any discomfort due to the nature of the questions in the survey and would like assistance please refer to the following national hotline numbers which are toll-free and available 24 hours a day 7 days a week 1-800-SUICIDE (784-2433) or 1-800-273-TALK (8255). The following is information on available resources for assistance with questions about sexual/reproductive health:

http://sfsi.org/wiki/Main_Page

Thank you for your participation