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Exploring Online Sexually Explicit Material: What is the Relationship to Sexual Coercion?

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by

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EXPLORING ONLINE SEXUALLY EXPLICIT MATERIAL: WHAT IS THE

RELATIONSHIP TO SEXUAL COERCION?

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With the popularity of the Internet, it is easy to access sexually explicit material. Past research has demonstrated that exposure to sexually explicit material in traditional formats (i.e. magazines and videos) may have an influence on male attitudes and behaviors towards females, but these effects appear to be minimal and dissipate over the long term. Though the body of literature examining Internet sexually explicit material is smaller, researchers have found little to no effects on attitudes or aggressive behaviors immediately after exposure. However, research regarding exposure to online sexually explicit material has not included forensically relevant variables.

Previous research has suggested that undergraduate males who report engaging in sexually coercive or aggressive behaviors differ in terms of personality, attitudinal, and behavioral variables from individuals who do not report this type of behavior. Therefore, the purpose of this study was to examine the same personality and attitudinal variables that have been studied in previous research, but to extend this research by including behavioral variables related to the viewing of online sexually explicit material. Male undergraduate students were provided with a link to take an online survey examining personality (empathy, sensation-seeking, and psychopathy), attitudinal (rape myth belief, acceptance of interpersonal violence, and hostility towards women) and behavioral (online sexual compulsivity and online behaviors with regard to sexual material)

variables. The relationship between these variables and sexually coercive behavior was examined.

Results indicate there is a significant relationship between some scales related to empathy and viewing sexually explicit or degrading material. Further results indicated that individuals who identified as having engaged in sexually aggressive behavior endorsed more items related to online sexually compulsive behaviors. Exploratory analyses revealed that the amount, as opposed to the type, of sexually explicit material viewed appears to be more related to adverse outcomes.

Dedication

I am forever indebted to all those who supported me on this journey. There were numerous times when graduate school seemed overwhelming, and I needed the love and encouragement I received to push me to be my best. A special thanks to my parents, who have provided me with unconditional love and support at every turn possible.

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CHAPTER 1: Introduction

Since the introduction of the Internet, society has changed in numerous ways. One of the most striking advances has been in communication, particularly with respect to social relationships and interactions. Individuals can now connect with others that they may not have had access to without the Internet. Due to this significant technological introduction, a new body of research is burgeoning. This research examines both general characteristics associated with computer and Internet use, as well as specific interpersonal and sexual activities such as Internet dating, viewing sexually explicit material online and using the Internet to meet sexual partners. This research is in its infancy across these areas and findings have been inconsistent.

Researchers disagree as to whether the Internet improves or negatively impacts social relationships and interactions as well as mood. Petrie and Gunn (1998; as cited in Hills & Argyle, 2003) surveyed 450 participants and concluded that people who self-define as Internet addicts scored higher on measures of depression and report being more introverted. Ward and Tracey (2004) administered a variety of measures to identify interpersonal competence, socially supportive behaviors, shyness, and relationship satisfaction to a sample of 414 undergraduates. Results of that study indicated that those who engage in at least one online relationship are shyer and have greater confidence in their computer abilities. Though shyness was indicative of difficulties with both online and face-to-face relationships, these difficulties were more substantial in the face-to-face interactions. In particular, difficulties with interpersonal competence (such initiation of relationship and disclosing behavior) were noted for those engaging in online relationships. Gender differences were noted; specifically with females, shyness was

related to more difficulties in face-to-face relationships than in online relationships, though females reported higher relationship satisfaction in face-to-face relationships. For males the opposite was found, shyness was related to greater difficulties only in relationship satisfaction in face-to-face relationships, but no other difficulties were noted. Furthermore, these authors noted that variables related to computer use, such as confidence in abilities, duration and frequency of time spent engaging in online relationships, also predicted satisfaction and number of friends developed online. Interestingly, shyness was not associated with increased use of the computer. Results of this study echo those of Petrie and Gunn (1998), suggesting that shyness or introversion could be highly related to Internet use and relationship formation. Further these studies point to the negative impact Internet use may have on mood and interpersonal relationship formation.

To examine the concept further, a longitudinal study of Internet users examined (Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay, & Sherlis, 1998) variables such as social involvement and psychological well-being variables over a 12 to 24 month period. In this study community participants were given a computer and changes in the variables of interest were tracked over time. The authors found that greater use of the Internet resulted in declines in family communication and declines in social circles. Further, increases in feelings of loneliness and depression were associated with increased Internet use. No differences in perceptions of social support or stress were noted. The authors concluded that use of the Internet negatively impacted social involvement and psychological well-being. These results are similar to those that study the impact of use

over a short-term period (Petrie & Gunn, 1998; Ward & Tracey, 2004) and point to the negative impact Internet use can have.

Though this research identifies negative impacts of Internet use, another body of literature discusses the positive aspects of communication via this medium. For example, Cooper and Sportolari (1997) argue that the Internet can facilitate "positive, warm interpersonal connections, including the healthy development of romantic relationships, which may indeed carry over into 'real life'" (p. 7). They state that the Internet opens avenues for exposure to people who might otherwise be passed over due to factors associated with attractiveness, ease in developing rapport, access to people with similar interests or tastes, and a safe venue for self-disclosure while maintaining personal space. Additionally the authors note that individuals who met on the Internet can develop an intimate, psychological and erotic connection that might be overlooked or impossible to develop in traditional face-to-face relationships due to societal pressures.

Other studies have examined the impact of Internet use further and have not found that negative consequences emerge. For example, Hills and Argyle (2003), found that older individuals were less likely to use the Internet than younger people, but there were no significant gender differences associated with use or non-use. Further, communicating with friends was the most popular Internet service used. The authors also administered self-report measures of loneliness, personality, self-esteem, and satisfaction with life. They found that Internet users were not social inhibited. The primary conclusions suggested that personality characteristics do not influence whether one is likely to use the Internet or not. Similarly, Katz and Aspeden (1997) found no difference between Internet users and nonusers' interactions with family and friends. These results point to a slightly

different conclusion indicating that the impact of the Internet may not be as negative or detrimental to relationships as other have suggested.

One of the most challenging aspects of research related to Internet use is the vastness of people who use the Internet making it difficult to find a truly representative sample. One study examined a global sample of 188 participants (Campbell, Cumming, & Hugh, 2006). The researchers found that time spent online was not significantly correlated with personality characteristics, depression or anxiety symptoms. As such, the authors then examined type of Internet use to study these ideas further. When examining users who chat online compared with those who do not, the researchers found that those who chatted were less likely to report symptoms of social anxiety and impression management when engaging in chat behaviors. Interestingly, chat users believed that the Internet was psychologically beneficial to them but reported that others who regularly use the Internet may be lonely. The results of this study are inconsistent with previous research that has highlighted the negative impact of the Internet (Kraut et al., 1998; Ward & Tracey, 2004; Petrie & Gunn, 1998) making it difficult to draw conclusive statements from this body of literature.

As can be seen from these studies, the research in this area is far from conclusive. However, what is clear is that the Internet is requiring researchers to delve into new areas because the Internet is clearly having a significant enough impact on daily routines to warrant investigation into the positive and negative outcomes associated with use. Further, researchers have questioned the influence the Internet has over interpersonal relationships. Given that there appears to be some difference between online and face-to-face relationships, it is only natural that romantic interpersonal relationships are also

examined. Therefore, the purpose of this study is to examine how the Internet has impacted romantic and sexual relationships formed on the Internet. As such a brief review of the literature on Internet use and dating will be presented to identify some of the precursors to Internet sexual behavior. Following that a review of the literature of Internet use and non-problematic sexual behaviors as well as problematic sexual behaviors will be conducted. When exploring these relationships, an examination of relationships formed online will be conducted as well as examination of the impact of Internet use on face-to-face relationships. In reviewing the literature, it will be important to highlight personality characteristics that may impact use, measures of psychopathology that may change if the Internet is used, and finally outcome variables, suggesting behavioral or attitudinal changes that occur as a result of Internet use.

In addition to examining interpersonal relationships it will also be necessary to look at how accessing sexually explicit material on the Internet has impacted people as well. As such, a review of the findings of the impact of exposure to non-Internet sexually explicit material will be presented. There are minimal studies that have examined the difference between online and offline exposure to sexually explicit material, but a review of what is known will also be presented. Finally, a brief overview of the legal implications of such work will be presented. This literature review will provide the foundation for the empirical study which follows.

CHAPTER 2: Internet Use and Sexuality

2.1 Theories Regarding Internet Use

It is clear that the Internet has a number of advantages with respect to accessing information for work and school as well as opening avenues for development of interpersonal relationships. However, it has been acknowledged that "since its inception, the Internet has been inexorably associated with sexuality in a synergistic dance, each fueling and ultimately contributing to the transformation of the other" (Cooper, Griffin-Shelley, Delmonico, & Mathy, 2001, p. 268). It has been hypothesized that one of the reasons for the Internet's popularity, particularly with respect to sexually explicit material, can be explained by the "Triple A Engine" which highlights three characteristics: Accessibility, Affordability, and Anonymity (Cooper, 1998). Individuals can access the Internet from virtually anywhere and they have access to a large group of people who otherwise would have been unavailable. Further, the Internet is relatively inexpensive and, if used from a public site, often free. Finally, the Internet provides a virtual filter or curtain behind which people can discuss certain topics or disclose certain information which may be difficult to do in face-to-face situations.

The "cues filtered out theory" is a similar synthesis of other theories and alludes to the feelings of anonymity that come from Internet use (Culnan & Markus, 1987). This theory suggests that since typical social cues are absent in Internet interactions, the individual gains a sense of anonymity. This anonymity may allow individuals to behave in manners they would not in face-to-face interactions including discussing taboo topics (Bargh & McKenna, 2004; Cooper & Sportolari, 1997). This theory echoes some of the advantages highlighted in the Triple A Engine theory (Cooper, 1998).

Beyond meeting people for friendship or dating, the Internet provides a unique venue for sexual outlet and exploration. Durkin and Bryant (1995) hypothesized that this technology allows individuals to act out sexual fantasies that are perpetuated by the instantaneous feedback the Internet can provide. McKenna, Green, and Smith (2001) proposed alternative reasons for sexual exploration on the Internet. One is safety, specifically, physical, emotional and social. Physically, sexual exploration in face-to-face relationships poses certain health risks that are not present in virtual sexual exploration. Emotionally, the Internet helps establish a boundary which can protect one from fears of embarrassment about rejection. Socially, it provides a safe environment in which to discuss taboo subjects. The reason proposed by McKenna and colleagues (2001) is frequency and convenience. They propose that if one is not sexually satisfied in his or her current relationship or does not have a partner, he or she may find a virtual partner at any time. To test these theories, the authors proposed that those who were not satisfied in their sexual lives would be more likely to turn to the Internet and more likely to express sexuality online. Utilizing an online survey, McKenna and colleagues discovered that individuals who are unsatisfied in their real world interactions turn to the Internet to express their sexuality and to help discover their sexual identities. Clearly, there are a number of plausible reasons that one may seek companionship, intimacy, or sexual partners over the Internet.

2.2 Internet use and dating

The Internet provides a number of different opportunities to meet and interact with new people. One of the most striking advances has been in dating. Individuals are able to meet new potential mates online that they may not have had access to before.

However, general perceptions of this method of dating have been mixed. One study examined attitudes towards online relationship formation (Donn & Sherman, 2002). In this study a small sample of undergraduates were either exposed to Internet dating site materials (such as questionnaires) or a brief statement describing such sites and asked to complete questionnaires measuring their reactions to such sites. Results indicate that participants expressed relatively strong concerns about individuals lying about information provided to the sites and therefore the participants expressed some reservations about utilizing the sites. Additionally, individuals reported concerns about not being able to see facial expressions or evaluate attractiveness. Interestingly, individuals did not report using the Internet in ways that would support theories of Internet as a medium for meeting others, such as forming relationships faster or finding disclosure of personal information easier (Cooper & Sportolari, 1997).

A study of adult Dutch Internet users examined online dating specifically looking at demographic predictors and theories of reasons for using the Internet (Valkenburg & Peter, 2007). Specifically two competing hypotheses of use of the Internet for dating were proposed. First, the social compensation hypothesis which suggests that people who are socially challenged may be to turn to online dating as an alternative since they have difficulties meeting people and going on dates based on face-to-face interactions. The rich-get-richer hypothesis suggests that people who have strong social skills may use the Internet as another avenue for finding a partner, simply taking advantage of it as another possible way to meeting people. The researchers examined these hypotheses by collecting demographic information, information on dating anxiety, and a log of how often participant visited dating sites. Results indicate that 43% of respondents had accessed an

online dating site, and that males reported visiting such sites more often than females. It appeared that individuals in their forties were the most likely to visit such sites and divorcees were three times more likely to use a dating site than individuals who had never been married. This study reported that individuals low in dating anxiety were more likely to use such sites with the authors suggesting that because of the familiarity with the Internet, online behavior may be beginning to mimic offline behavior. Therefore, the rich-get-richer hypothesis received greater support than the social compensation hypothesis.

Peter and Valkenburg (2007) also tested two similar hypotheses of why people look for casual dates on the Internet. In the first, the compensation hypothesis, they suggested that individuals with high dating anxiety and low physical self-esteem would use the Internet more than those with the opposite characteristics because of the anonymity provided by the Internet. Alternatively, the recreation hypothesis suggested that sexually permissive, high sensation-seeking people would look for casual partners on the Internet, again because of the anonymity. A variety of self-report measures were administered to participants to test these hypotheses. The compensation hypothesis did not receive much support, suggesting that physical self-esteem and dating anxiety may not be related to searching for casual dates. The recreation hypothesis received some support, suggesting that high sensation-seeking and sexually-permissive people are more likely to look for casual dates online.

Looking at a similar concept in college students, Stevens and Morris (2007) examined whether individuals high in social or dating anxiety were more likely to use the Internet for dating, and whether the severity of the anxiety symptoms impacted the level

of Internet involvement and the likelihood of meeting a person met on the Internet face-to-face. Such questions were tested through a variety of self-report measures. Slightly more than a quarter of the sample (28.5%) had developed some type relationship online with 10% meeting a romantic partner this way. Several interesting findings emerged. Individuals low in social anxiety were more likely to blog than those high in social anxiety, but individuals high in social anxiety were nine times more likely to utilize a webcam to communicate with other individuals. Further, individuals high in dating anxiety were also more likely to use a webcam. As the webcam is arguably a more personal way of meeting people than chat on the Internet alone, these results call into question the nature of anxiety and Internet use, and suggest that the relationship between the two constructs needs to be examined further. Further the theory that the Internet appeals to some because of its anonymity (Copper, 1998; Cooper & Sportolari, 1997) is also called into question, as use of a webcam removes an element of anonymity. Perhaps individuals feel safer because they are communicating over the Internet and therefore are more likely to engage in behaviors they otherwise may not have.

Results of these studies are somewhat inconsistent with respect to the role anxiety may play in influencing individuals behaviors online. It would seem that for some their behavior online mimics their behavior offline, whereas other are emboldened by the Internet to engage in atypical behaviors. Based on the theories tested by researchers, it appears that behavior with respect to online dating is more likely to mimic offline dating behaviors, such that individuals who tend to be successful in meeting people offline are more likely to have success and pursue meeting people online. The popularity of meeting

people online for dating purposes is clearly evident however, the reasons people engage in such behavior appear to be varied and warrant further exploration.

2.3 Internet Use and Sexual Behavior

2.3a Types of Users

Researchers have hypothesized different types of cybersex users. Cooper, Putnam, Planchon and Boies (1999) proposed three categories: recreational, sexually compulsive, and at-risk. Recreational refers to users who engage in cybersex primarily for entertainment and use of the Internet does not negatively impact their life. Sexually compulsive individuals have difficulties with sexual issues in their lives and find the Internet to be an outlet for exploring such interests. Often, Internet cybersex use reaches a problematic level in this group of individuals where there is a significant impact on their daily functioning. Finally, the last group, at-risk users, has been subdivided further into two types: depressive and stress-reactive. In the at-risk group, individuals have generally never had difficulties with sexually issues but exhibit characteristics that may put them at higher risk. For the depressive group, use of the Internet for cybersex may alleviate symptoms of depression. The stress-reactive subtype is prone to utilizing the Internet for sex related activities in times of great stress as a means of coping. Data supports these categories. Using a sample of online participants, Cooper, Delmonico, Grrifin-Shelley, and Mathy (2004) found that the majority of individuals who use the Internet for sexual activity fall into the recreational category and do not report any negative effects from such use. About 13.8% of the sample fell into the sexually compulsive category by endorsing past problems with sexual activity. With respect to the at-risk category, 32% of male respondents and 17% of female respondents admitted to using the Internet to help

relieve stress, but the authors did not categorize all these individuals into the stress-reactivity subtype of the at-risk category. The study did not examine depressive symptoms, and thus the at-risk category remains open for further exploration. Interestingly, another category was identified, the fantasy type, which accounted for 10% of the sample, and describes individuals who use the Internet for sexual fantasies, but do not necessarily have the same sexual problems as the sexually compulsive group. The fantasy users fit with Durkin and Byant's (1995) theory that the Internet provides a safe venue in which to act out these fantasies, and therefore allows individuals who otherwise may not have explored such ideas to investigate them further.

2.3b Review of Research Examining Online Sexual Behaviors

As Internet accessibility changes research regarding material accessed on the Internet changes and examining the similarities and difference between online and offline behaviors has become increasingly more important in order to identify if individual behavior changes across mediums. One study examined access to sexually explicit material and engagement in sexual behaviors online and offline (Boies, 2002). Results indicate that participants accessed more sexually explicit material offline than online. The number of online and offline sexual partners differed as well. Boies (2002) found that only 8.1% of participants admitted to one or more online sexual partners in the last year whereas over 44% of the sample admitted to one or more offline sexual partners during that same time frame. Because of the self-report nature of this survey, it is unclear how accurate these results are. It is possible that people reported viewing sexually explicit material, but not engaging in online behavior because the latter may be more stigmatizing

than the former. Alternatively, it is possible that though people are using online sexually explicit material for arousal, they still seek a face-to-face partner for sexual activities.

One area that researchers have examined is the use of sexually explicit material in adolescents. Because the Internet has increased the accessibility of such material to youths, this is an area of particular interest. Despite the fact that many websites require participants to sign a consent form stating they are of consenting age, there is no way to truly identify if information provided is correct. One study found that 15% of adolescents have lied about their age in order to visit a website that has sexually explicit material (Lenhart, Rainie, & Lewis, 2001 as cited in Ybarra & Mitchell, 2005). As such, research identifying differences between adolescents who access sexually explicit material online versus who use different forms of sexually explicit material may lend insight into future pornographic use by adults. Ybarra & Mitchell (2005) surveyed adolescents regarding methods of accessing sexually explicit material, clinical characteristics, Internet usage patterns, and caregiver patterns in order to identify if teenagers who access sexually explicit material on-line are different from those that do not. Seven percent of the sample report offline only seeking behaviors and eight percent reported online seeking. Interestingly, over a quarter of the sample reported unwanted exposure to sexually explicit material on the Internet. Further slightly less than half of individuals who accessed sexually explicit material either online or offline reported delinquent behavior. When differentiating between those who accessed online versus offline sexually explicit material, those who accessed online tended to be older. Hispanic youth were three times more likely to report accessing such material online. High ratings of computer confidence were also indicative of accessing sexually explicit material online. Online sexually

explicit material users reported poorer relationships with their caregivers but also reported more household rules about not visiting such sites. These findings suggest that at an early age, differences between online and offline sexually explicit material users emerge.

A number of studies have examined online sexual activity to determine the rate at which this behavior reaches a problematic level. A large scale study examined why people engage in online sexual activity (Cooper, Scherer, Boies, & Gordon, 1999). Participants were recruited online resulting in a sample of over nine thousand participants. Most individuals in the sample reported using the Internet for sexual purposes less than twenty hours a week, with a significant majority reporting using it under ten hours a week for such purposes. About 8.5% of the sample endorsed items suggestive of compulsive Internet use for online sexual activities. Gender differences emerged, with men engaging in more secretive and risky behaviors.

Cooper and colleagues (2001) utilized a sample of over seven thousand participants in order to explore the role that online sexual activity played in individuals' lives as well as to examine the frequency of online sexual behavior rising to a self-described problematic level. About 6.5% of males responding to the survey endorsed items suggestive of problematic behavior. Individuals who were identified as having problematic online sexual activities differed from those who used the Internet for sexual purposes but did not encounter clinically significant problematic outcomes from such use in a variety of areas, including marital status, more time spent online engaging in sexual activities including masturbation and cybersex, and in the negative consequence of online sexual activity, such as reduced sex with a partner. Individuals who reached a

problematic level had significantly stronger histories of problematic behaviors, such as drug and alcohol abuse of compulsive gambling. General results of the survey provided information with respect to why people are engaging in online sexual activity which included distraction, education, stress relief, meeting dates, meeting sexual partners, getting support for sexual concerns and purchasing sexual materials.

Carvalheira and Gomes (2003) examined reasons for engaging in online sexual chatting and behaviors associated with this behavior. The biggest factor that emerged as reasons why individuals engaged in online sex chat was anonymity. The authors found that this medium allowed individuals to engage in fantasies and desires that could not otherwise be expressed. It was further noted that this particular type of chat appealed to individuals who had poor social skills. The authors suggested that perhaps online forums allow individuals to experience certain sexual behaviors, fantasies, or desires that they may not be able to in face-to-face relationships.

Goodson, McCormick, and Evans (2000) examined some of the emotional responses college students have when viewing sexually explicit materials online. Participants completed a variety of self-report measures. Results indicate that participants reported have a general feeling of excitement and anticipation as the most frequent emotion, followed by disgust, entertainment and the sexual arousal. Interestingly, Latino individuals reported greater fears of being caught viewing such material than Caucasian students. Further, Latino females were twice as likely to report feelings of sexual arousal than Caucasian students. These results suggest the importance of considering cultural differences when conducting research. Further, it appears that, at least in college students, the novelty of the stimuli may be more emotionally arousing than sexually arousing.

CHAPTER 3: Exposure to Sexually Explicit Material and Offending Behavior

3.1 Theories of Development of Problematic Behavior

Numerous researchers have hypothesized that viewing sexually explicit or more importantly sexually violent material can lead to an increase in sexually aggressive behaviors. However, there are competing theories as to why this behavior may develop and many of these theories stem from theories of learning. For example, Berkowitz (1984) proposed an information processing model of sorts, suggesting that exposure to certain material can provide a priming effect that can activate other networks; "…aggressive ideas suggested by a violent movie can prime other semantically related thoughts, heightening the chances that viewers will have other aggressive ideas in this period" (p. 411). In that paper, Berkowitz reviewed numerous studies which introduced a violent or aggressive stimuli to participants and measures an increased in the use of violent or aggressive behaviors or interaction styles in outcome behaviors (i.e. Leifer & Roberts, 1972; Carver, Ganellen, Froming, & Chamber, 1983). Huesmann (1988) also proposed an information processing model which theorized that aggressive behavior develops in childhood as a result of exposure to various factors that condone such behavior. The basic premise behind information processing theories is that behavior is controlled by cognitive scripts which are developed from exposure and responses to certain events. When a person enters a similar situation, or encounters a similar emotional state, the script is activated and dictates how the person will respond (Huesmann, 1988; Berkowitz, 1984; Paul & Linz, 2008). This theory has been applied to both directly observed behavior as well as behavior presented through a media format (i.e. movies, television, etc.).

Another theory employed to help explain how viewing sexually explicit material can turn into a problematic level is social learning theory (Paul & Linz, 2008; Bandura, 1965, 1971, 1973). This theory suggests that certain behaviors can be learned by observing modeled behaviors and how others respond to such behavior by rewarding or punishing it. As applied to the development of sexually deviant behavior, sexually explicit material may depict images that are suggest certain sexual acts are desirable or appropriate, making it difficult to differentiate which acts are permissible and impermissible in sexual situations with a partner.

Excitation transfer theory has also been used to explain how viewing sexually explicit material can lead to negative outcomes (Zillman, Hoyt, & Day, 1974; Allen, D'Alession, & Brezgel, 1995). The theory suggests that arousal from one situation can be transferred to another situation and that emotion felt in one situation may transfer to another situation if the physiologic arousal is present. It has been summarized with respect to sexually explicit material as such: "make a person angry with some target, show the person a pornographic film, then create conditions that permit the person to aggress against the target. The amount of aggression should be in direct proportion to the intensity of the anger felt initially, combined with the degrees of arousal induced by the sexually explicit film" (Allen, D'Alession, & Brezgel, 1995, p. 261; Zillmann & Sapolsky, 1977). If a person is in an angry state and exposed to pornographic material, that person will associate the arousing effect of sexually explicit material with the anger.

Finally, Fisher and Barak (2001) proposed the Sexual Behavior Sequence (Byrne, 1977; Fisher, 1986) as a possible theoretical basis for understanding use of sexually explicit material on the Internet. This theory proposes that "individuals respond to

unconditioned sexual stimuli with physiological sexual arousal…The Sexual Behavior Sequence also asserts that any other discriminable stimulus which is associated with an unconditioned erotic stimulus can become a conditioned erotic stimulus with the capacity to elicit physiological sexual arousal itself" (Fisher & Barak, 2001, p.317). The theory proposes two pathways that result in sexual behavior: exposure to sexual stimuli, either sexual arousal or affective responses, and the sexual behavior. As such, the Sexual Behavior Sequence suggests that use of sexually explicit material may prime an individual for future sexual behavior, either online or offline, and develop certain behavior responses. If dysfunctional behavior arises, there may be a variety of reasons that stem from the individuals response to sexually explicit material which resulted in the sexually deviant behavior.

3.2 Effects of Exposure to Sexually Explicit Material

In general research on the effects of exposure to sexually explicit material either examined the impact on youth or on attitudes, predominately attitudes regarding violence towards female. A large body of literature has examined the effects of viewing sexually explicit material on male's attitudes towards female. In particular, researchers have examined the concept of "rape myths." Burt (1980) hypothesized that stereotypical beliefs about rape (e.g. female ask for it) neutralize social cues indicating this behavior is unacceptable to potentially sexually aggressive individuals. Without the filter of social norms and the beliefs that such behavior is acceptable, these individuals may be more prone to act on their beliefs. One of the early studies examining the relationship between sexually explicit material and rape myths, which are stereotyped false beliefs about rape, victims, and perpetrators (Burt, 1980; Malamuth & Check, 1985) exposed undergraduate

males to pornographic audiotape recording and measured changes in responses on a variety of questionnaires. Results indicate that if the stimulus included information suggesting that a rape victim becomes sexually aroused during an attack, males were more likely to endorse belief in this myth. The authors concluded that exposure to aggressive sexually explicit material will increase male acceptance of rape myths if the victim in the stimulus receives positive consequences (Malamuth & Check, 1985).

In a study utilizing similar methodology, arousal patterns were measured (Malamuth & Check, 1983). Results of that study indicate that men who scored high on a likelihood of rape scale demonstrated more arousal to depictions of non-consenting sex where the victim was portrayed as becoming sexually aroused. However, even subject scoring low on the likelihood to rape scale showed some arousal at consenting and non-consenting sexual depictions where the female was portrayed as aroused. No arousal was indicated in conditions where the female displayed disgust. These findings suggest that pornographic portrayals of aggressive sex may influence males' perceptions which may in turn impact their behaviors.

Another study examined the long-term effects of exposure to violent and nonviolent sexually explicit material (Malamuth & Ceniti, 1986). Subjects completed preexposure ratings of likelihood to rape and were then exposed to sexually violent, sexually nonviolent, or a control condition and exposed to the stimuli initially, four weeks, later, and then twice a week for a three week period. There were then given a post-exposure condition which occurred two to three days after the above exposure period and sexual arousal was assessed. Additionally, aggression was assessed through interactions with a female confederate. Results showed a correlation between aggression

and likelihood to rape and indicated that the strength of these correlations significantly increased after exposure. However, with respect to the likelihood to aggress towards a female, results showed that exposure to sexually explicit material did not have any significant impact on laboratory aggression. The authors hypothesized that this may be because of the length of time and that the findings of other researchers that sexually explicit material does have an impact on aggression towards female may be due to the immediacy of the measurement of aggression, and that the tendency to aggress may dissipate over time.

Linz, Donnerstein and Penrod (1988) also explored the effects of long-term exposure to sexually violent material specifically testing the hypothesis that desensitization to such material occurs, which may explain the lack of effect found by Malamuth and Ceniti (1986). Subjects watched either overtly sexually violent films, sexually explicit and degrading films, or films that portrayed female as sexual objects. Subject viewed two or five films every other day. Subjects were then asked to participate in a rape trial and were in one of two conditions: the assailant was either an acquaintance or had just met the victim that evening. Subjects filed out a variety of questionnaires pre and post manipulation. Results indicate that the sexually violent material that was initially considered depressing and anxiety provoking became less so. Subjects in the sexually violent and sexually explicit conditions reporting finding the material less violent and less degrading over continued exposure. Watching two movies had the same desensitization as watching five. Subjects exposed to the sexually violent, explicit and degrading films were less sympathetic to the victim of the rape than control subjects or subjects exposed to other types of films. However, the authors found that prolonged

exposure to these films did not result in changes in the attitudes or beliefs about female, as other authors have found. The authors suggested, echoing Malamuth and Ceniti (1986) that immediacy of exposure may be necessary in order to uncover degrading effects in attitudinal measures.

Research has also examined non-violent sexually explicit material to examine its impact on males to identify if it activates certain thoughts in male causing them to treat female differently (McKenzie-Mohr & Zanna, 1990). Specifically, they suggested that male exposed to sexually explicit material would have certain schematic information related to traditional sex roles activated which would make them treat female as a sexual object: "Treating female as a sexual object, then, is defined as employing a heterosexuality schema that subsequently leads to biased schematic information processing and/or over sexually motivated behavior when, given the situation, other schemata would be more appropriate" (Mckenzie-Mohr & Zanna, p. 298). Stereotypically masculine or androgynous males participated in the study (identified the BSRI, Bem, 1974, 1981). Subjects were either in the control condition watching a neutral film or watched a short pornographic film. They were then asked to fill out a questionnaire and interacted with a female confederate who pretended to administer a survey, but actually rated their behavior. Results indicate that stereotypically masculine participants exposed to sexually explicit material were viewed by the female as more sexually motivated, positioned themselves close to her and had greater and faster recall of her physical appearance. Further, they reported less recollection of the questions she asked. The results of Mckenzie-Mohr and Zanna's (1990) study suggest that sexually explicit material does make males treat females differently, even if the sexually explicit material

is not violent. The differences in the behavior extend beyond beliefs about sexual behavior to evaluations of intelligence and a focus on physical characteristics.

Using sexually explicit films, Mulac, Jansma, and Linz (2002) examined this concept further. Participants were placed into one of three groups, viewing a neutral film, a sexually explicit film, and a sexually explicit and degrading film. Participants completed a self-report survey of sex roles before and after viewing the film. Further, researchers coded a variety of behavioral variables. Results of this study indicate that males who watch sexually explicit material demonstrate more behavior dominance over females, ignore intellectual contributions of a female, and though they make more bodily contact, spend less time looking at their partner. When considering the difference between degrading and not degrading sexually explicit films, results of the study indicate that males who viewed degrading films showed less anxiety when interacting with females, interrupted more and made more sexual references. As far as physical behaviors, these males looked at their partner for less time overall and touched their partner for shorter periods of time than the males who had viewed the non-degrading film. Results of the study showed that males who reported subscribing to less stereotypic sex roles were more affected by the material, demonstrating more behavioral differences. The researchers failed to uncover any differences in female exposed to the same conditions.

Looking at sexually explicit material and individuals who self-identify as sexually coercive, research has found similar results (Lohr, Adams, & Davis, 1997). Results of a study exposing individuals to rape scenarios involving verbal pressure, threats or physical force revealed that sexually coercive individuals demonstrated more physiologic arousal to such scenes than controls. Further, this level of arousal was stable even when

nonconsensual or forceful cues were introduced after arousal began. Sexually coercive males became aroused more easily. There were no differences in arousal levels for the groups when viewing consensual sexual activity. The sexually coercive group reported preferring the consensual stimuli over the forcible stimuli but arousal levels did not change.

A meta-analysis was conducted in order to summarize the information known about exposure to sexually explicit material (Allen, D'Alession, & Brezgel, 1995). In order to be included in the analysis, a study had to use a dependent measure that involved a degree of physical, material or psychological interpersonal aggression. The results of their analyses indicated that exposure to sexually explicit material increases behavioral aggression ($r = .132$). A meta-analysis of the studies utilizing measures of rape myth acceptance revealed a small but significant positive correlation ($r = .103$) across studies indicating that as exposure to sexually explicit material increased so did acceptance of rape myths (Allen, Emmers, Gebhardt, & Giery, 1995). However, the authors explored several moderating conditions that may impact when a change is observed. They found that exposure to nudity not involving any sexual acts decreased aggression. The results found that both nonviolent and violent sexually explicit material lead to increased aggression. Therefore, metaanalytic studies suggest that there is a small but significant effect of exposure to sexually explicit material on aggressive behavior and acceptance of rape myths.

Jansma, Linz, Mulac and Imirch (1997) noted that some of the limitations of research done in this area include a lack of operational definitions of important concepts. For example, many studies portray "degrading" material, but Jansma and colleagues

(1997) argue that this is a subjective judgment, which may lead to inconsistencies in the type of stimuli presented and therefore the generalizeability of the results. To address such limitation, they designed a study where participants were exposed to films and then rated the films on a number of characteristics in order to incorporate participants' subjective views rather than researchers' subjective interpretations of the material. They administered additional self-report measures in order to identify if themes that had emerged in previous research (i.e. increased negative attitudes and aggression towards female) emerged in the same pattern when subjects classified the type of stimulus they were watching. Results indicate that subjects classified the material shown in the same manner that the researchers would have: degrading, non-degrading, and non-sexual. Further, there were no statistically significant differences in male ratings of female's intellectual competence, sexual interest, attractiveness or permissiveness across film conditions. Females rated their partner's behavior after the partner was exposed to the material and no differences were noted across conditions. These results are in contrast to those of (Malamuth & Check, 1985; Malamuth & Ceniti, 1986) who found that exposure to pornographic or sexually explicit material would change males' attitudes or behaviors or aggression towards their partners. The differences in findings suggest the need for continued exploration. Results of the study by Jansma and colleagues (1997) also examined the impact of sexually explicit material to see if it varied across male's sex-role orientation. Researcher found that stereotypically masculine males rated females' sexual interest in them to be higher after viewing a non-sexual film, and after exposure to the sexual film, these ratings dropped. Additionally ratings of female's intellectual competence also dropped after sex-typed males were exposed to sexual films.

3.3 Internet Specific Research

Though much has been examined with respect to traditional forms of sexually explicit material, the impact of Internet sexually explicit material is lesser studied. Since the Internet is a unique medium, some have stated that it may be "less involving, less rich, and less personal" than traditional forms of sexually explicit material (Cooper & Sportolari, 1997, p.8). This lack of personal connection may result in different responses to sexually explicit material viewed on the Internet than that viewed through magazine or video. Research has arrived at competing conclusions.

Barak, Fisher, Belfry, & Lashambe (1999) examined the impact of increasing exposure to Internet sexually explicit material on attitudes towards females, likelihood of sexually harassing a woman, and rape myth acceptance. Twenty-four participants were recruited and selected sites to view from a list of bookmarked sites on the laboratory computer. The various sites included nudity, sexual acts, sex-related stories and discussions and a variety of other sex-related stimuli. Random assignment to one of four different conditions was employed. The four different conditions available included, one with neutral sites, one with primarily neutral sites, but three pornographic cites, a third with half of the sites being pornographic in nature and a fourth with 80% of the cites being pornographic. Results of this study echoed previous work which found no significant changes in attitude or beliefs after viewing such material (Barak et al., 1999). The same study also examined different characteristics such as sensation seeking and social desirability among individuals who were randomly assigned to conditions that has no bookmarked pornographic sites available for viewing, minimal pornographic sites available or a lot of sites available while surfing the Internet (Barak et al., 1999). This

study found that men's attitudes towards female were more directly related to factors such as sensation seeking, hypermasculinity, and prior experience with sexually explicit material than from viewing sexually explicit websites. The authors concluded that exposure to Internet sexually explicit material did not have deleterious effects on men's attitudes towards female and instead stressed that personal factors strongly influence such attitudes. Notably, the sample size in these studies was extremely small.

Utilizing a much larger sample, Yoder, Virden, and Amin (2005) examined the association between sexually explicit material and loneliness, specifically hypothesizing there would be a correlation between the amount of time spent viewing sexually explicit material websites and rates of loneliness. Surveys were placed on eight sexually explicit material websites. A clear association between loneliness and days per week spent viewing Internet sexually explicit material was not found; however, other interesting associations emerged. For example, minutes spent viewing sexually explicit material was not as strong of a predictor of loneliness as was minutes spent on the Internet for none pornographic use. While the association between Internet sexually explicit material use and loneliness exists, further examination is necessary in order to fully explore this relationship.

One study examined the role that connections to various aspects of life (i.e. religious, martial) may play in the use of Internet sexually explicit material (Stack, Wasserman, & Kern, 2004). A variety of self-report instruments were administered to participants and analyses revealed that extramarital affairs and ever having paid for sex were related to Internet sexually explicit material use. Further, knowledge of the use of computers was related to use, but age was inversely related. Religious bonds had a

negative influence on Internet sexually explicit material use, as did marital bonds to a lesser degree. This particular study pointed to a variety of factors that may influence Internet use. It appears that sexually deviant or promiscuous behaviors offline are related to an increased likelihood of searching for sexually explicit material online.

Additional researchers have examined characteristics that make people more inclined to search for sexually explicit material on the Internet. Nosko, Wood, and Desmarais (2007), examined attitudes towards unsolicited sexual materials as well as characteristics that influenced the likelihood of people searching for such materials. Variables measured included computer use and expertise, attitudes towards sexually explicit materials on line and Internet use. Results indicate that females have less positive attitudes towards this material than males. Further, men not only displayed positive attitudes but the mean score approached a ceiling level suggestive of extremely high endorsements of such material. As such, men were more likely than female to search for sexually explicit material online. Experience with a computer predicted positive attitudes towards sexually explicit material as well. The researchers suggested that perhaps individuals become desensitized to such material with continued exposure. With respect to searching for sexually explicit materials, there was no relationship between positive attitudes and searching behaviors. The number of hours spent online and curiosity about sex were however, related to searching behavior.

Similarly, Shim, Lee, and Paul (2007) conducted a study designed to examine who responds to unsolicited sexually explicit material. Participants completed surveys designed to assess antisocial disposition (propensity towards antisocial tendencies), sexual disposition (acceptance of various sexual behaviors) as well as reported on

responses to unsolicited material. Results indicate that individuals with more sexually liberal dispositions and more antisocial dispositions were more likely to explore unsolicited sexually explicit material. These findings suggest that certain preexisting attitudes may make one more likely to access certain materials even if they were not originally intending to do so.

One large scale study of children ages 10 to 17 examined the role of sexually explicit material in teenagers lives (Mitchell, Finkelhor, & Wolak, 2003).Variables such as unwanted exposure to sexual material, delinquency, negative life events, Internet use, online behavior, and relationship with parents were measured. Results indicate that a quarter of respondents had at least one unwanted exposure to sexually explicit material on the Internet. It was concluded that "it appears that more intensive, more exploratory, and more risky Internet activities increase the change of exposure to unwanted materials" (p. 343). Only eight percent of the sample admitted to seeking sexually explicit material online. Most of the participants indicated that unwanted exposure was not harmful, but indicating that it was not distressful, however one-fifth of participants reported stress symptoms following the exposure. This research suggests that at a young age, individuals may not find the material harmful, but did not measure if there are any significant changes in attitudes or behaviors after exposure to such material.

In another interesting turn, researchers have begun to distinguish between "real" sexually explicit material and "virtual" sexually explicit material. Virtual sexually explicit material is that in which no actual human beings are used in the making of the films, but the films are constructed with digitally created pictures. Nowhere has the debate been stronger than in the arena of child sexually explicit material, and as such

research has begun to examine the difference in exposure to virtual sexually explicit material, for obvious reasons, no exposure to real child sexually explicit material appears in the literature. Participants were subject to either an Internet based or non Internet based viewing of one of four types of stimuli: barley legal, age 21-28, age 31-45 or over the age of 50. Participants engaged in lexical decision making tasks before and after viewing the material. Results indicate that participants exposed to barely legal stimuli considered such stimuli to be less prevalent and less popular than those in other conditions. Gender difference emerged as male participants found legal sexual behaviors more acceptable than females. Lexical decision-making tasks were employed to test the spreading activation theory described above (Paul & Linz, 2008). Results indicate shorter response latencies for participants exposed to barely legal sexually explicit material. The authors concluded that exposure to virtual child sexually explicit material (barely legal) may lead to cognitive associations of sex with minors. However, exposure to such sexually explicit material did not increase the acceptability of the stimulus, suggesting that some of the alleged deleterious effects may not be accurate descriptions of the experience of virtual sexually explicit material (Paul & Linz, 2008).

Consistent with previous research on sexually explicit material, recent research has examined the effects of Internet sexually explicit material on male attitudes towards females, rape myth acceptance, and aggressive behavior toward females. Barak and Fisher (1997) hypothesized that "the more interactive control men are given over female sexuality in the interactive erotic stimuli understudy, the more men should be persuaded that females are easily manipulated and controlled" (p. 356). Participants were exposed to either a neutral stimulus on the computer or one of three erotic stimulus conditions. In the

neutral stimulus and one of the erotic stimulus conditions, the participant was a passive observer. In another of the erotic conditions, the participants had moderate control over the pictures and were able to browse back and forth between images and adjust the brightness. Finally, in the last condition, participants were able to change color, size, and skewing of the photos as well as create art with them. After the exposure a female confederate entered the room for an anger induction in order to assess aggression towards females. They also completed a variety of measured designed to assess attitudes towards females, rape myth belief, sexual arousal and aggressive behaviors. Results indicate that there were no differences among conditions, suggesting that interactive erotic stimuli do not differ from passive erotic stimuli (Barak & Fisher, 1997). This research is inconsistent with other research which has suggested that exposure to sexually explicit material increases beliefs in rape myths acceptance and aggression towards females (Malamuth & Check, 1985; Allen et al., 1995; Malamuth & Ceniti, 1985). But, this research is important in the development and extension of the body of research on sexually explicit material to including Internet sexually explicit material.

CHAPTER 4: Differences in Offending Behaviors

The manufacture and viewing of adult sexually explicit material are not by definition illegal. Therefore, when researchers study sexually explicit material use, it is primarily on community samples. However, the role that sexually explicit material may play in offense behaviors is of importance particularly because with the increase in availability and accessibility of materials, offenders who use sexually explicit material during their offenses or whose primary offense is the manufacture of sexually explicit material depicting children may represent unique type of offender that may require treatment that differs from traditional sex offender treatment.

One study examined the use of traditional sexually explicit material and compared convicted of sexual offenses to non-offenders. Participants were interviewed and coded on variables based on self-report (Marshall, 1988). Non-offenders reported less current usage of sexually explicit material, with incest offenders reporting the second least usage. With respect to sexually explicit material and the index offense, incest offenders endorsed using sexually explicit material as an instigator for the offense less than other offenders. Approximately one third of the rapists and child molesters in the sample admitted to using such material and being incited to commit an offense. Because the use of sexually explicit material in the study was defined as "hard-core" or extremely explicit, perhaps it can be concluded that rapists and child molesters may have more deviant thoughts that are either activated or perpetuated by exposure to sexually explicit material. Because of the self-report, retrospective nature of the data collection, no causal relationship is present, however, these results suggest the importance of continuing to study the impact of sexually explicit material on sexually deviant behaviors.

Seto and Eke (2007) examined a group of offenders that were convicted for manufacture or possession of sexually explicit material depicting children to identify what factors may put them at risk for reoffense and if they were at higher risk of reoffense than those without a conviction for child sexually explicit material. Results indicate that 17% of the child sexually explicit material offenders reoffended during the follow-up phase with about four percent committing a new child sexually explicit material offense. Of the sample, individuals with a criminal history prior to the conviction for the child sexually explicit material charge were more likely to reoffend. Specifically, those who had committed a contact sex offense were the most likely to reoffend, but even those with non-sexual criminal histories were more likely to reoffend than those with no criminal histories. The authors pointed to the need for proper risk assessment instrument designed to measure the risk levels of child sexually explicit material offenders with no history of sexual contact with a minor.

Another study indicated that a charge for an offense related to the sexually explicit material depicting children, was a valid indicator of deviant sexual arousal patterns indicative of pedophilia (Seto, Cantor, & Blanchard, 2006). It was found that individuals with a history of child sexually explicit material offenses were more likely to show sexual arousal during physiological testing that individuals charged with contact offenses against children. These results have a variety of implications. Legally, these results fuel the debate on virtual child sexually explicit material, suggesting that perhaps since child sexually explicit material offenders are showing deviant sexual arousal patterns, exposure to virtual images where there are no victims may be one way to satisfy such urges. Additionally, it would appear that child sexually explicit material offenders

do make up a unique class of sex offenders that warrants further exploration into the appropriate type of risk assessment procedures as well as the most effective treatment.

Similarly, Elliot, Beech, Mandeville-Norden, & Hayes (2009) compared 505 adult male Internet offenders to 526 adult male contact sexual offenders and discovered significant differences. When considering the nature of the offenses, the Internet offenders were generally convicted for offenses surrounding the manufacture and distribution of pornography whereas contact offenders had some sort of sexual contact with a child under the age of 16. Significantly more contact offenders (23.8%) had previous, known sexual offense convictions than Internet offenders (10.9%). The contact offenders were slightly older, had more previous known convictions and tended to perpetrate against only one gender. Further, contact offenders endorsed more victim empathy distortions, cognitive distortions and had more favorable self-images than pornography offenders. Contact offenders expressed more deficits when considering the impact of sexual behavior on children.

Bourke and Hernandez (2009) investigated the distinction between offenders convicted of charges related to sexually explicit material depicting children and contact offenders and examined whether the former group admitted to contact with victims in treatment, even though they may not have been formally charged for the crimes. At the beginning of treatment, in a sample of 155 offenders convicted of crimes related to sexually explicit material depicting children, 115 had no documented contact with a victim at the beginning of treatment. At the end of treatment, only 24 continued to deny any hands-on sexual abuse, which means a significant portion of the sample admitted

additional victims. Of note, those with documented hands-on sexual offending at the time of sentencing had more than twice as many victims.

Another study compared the cognitive distortions of sex offenders whose offense involves contact with a child and those whose offense involves Internet child sexually explicit material but no contact with children (Howitt & Sheldon, 2007). Using a sample of contact-only offenders, Internet-only offenders and mixed contact offenders, the authors used a combination of self-report measures as well as items developed based on Ward and Kennan's (1999) theory which proposes five different core schemas underlying pedophilic thinking: children as sexual objects, the world is a dangerous place, entitlement, the nature of harm and the world is uncontrollable. Internet only offenders scored higher on the children as sexual objects scale than contact only offenders. The authors found that the cognitive distortions most frequently accepted by offenders were those that were "conducive to offending" (p.481). Interestingly the results of this study are consistent with the findings of Seto and Eke (2007) which suggest that Internet offenders are more likely to show arousal patterns consistent with pedophilia than contact offenders. It would appear that research thus far on Internet only child sexually explicit material offenders points to a subgroup of offenders who demonstrate truly sexually deviant arousal patterns and beliefs whereas contact offenders appear to respond differently. This suggests a need for continued research on contact only offenders as it seems that these individuals represent a unique group of sex offenders.

Results from the initial inquiry into this field of research suggest that online offenders have some similar needs to contact offenders, but also have some unique treatment needs. For example, research has suggested that online offenders may have

contact with victims, but may not be charged or convicted for such contact, suggesting

they may have needs that parallel offenders who have been charged with contact offenses

(Bourke & Hernandez, 2009). Further, online offenders may have unique cognitive

distortions (Seto & Eke, 2007) and may have more deviant sexual interests (Seto, Cantor

& Blanchard, 2006; Elliot et al., 2009) than contact offenders. Therefore, while online

offenders may engage in contact offenses as well, they present with a variety of

differences that point to the need for unique treatment and assessment methods.

CHAPTER 5: Legal Implications

One of the reasons online sexual explicit material has come under fire is its potential overlap with the legal notion of obscenity. Presently, the Court uses the test outlined in *Miller v. California,* (1973) to define obscene material. The test is three pronged, asking the trier of fact to consider whether the average person applying contemporary community standards would find that the work, taken as a whole, appeals to the prurient interest, whether the work depicts or describes sexual conduct in a patently offensive way and whether the work lacks any literary, artistic, political, or scientific value. The first way that online sexually explicit material can be scrutinized is under obscenity laws, in order to determine if the material is obscene. Making this determination becomes extremely complex because a critical part of the obscenity standard involves community standards. Defining who is part of the Internet community is a difficult task, and when this community is established, determining a community standard of obscenity will be even more challenging.

As justification for obscenity laws, many law and policy makers have pointed to the deleterious effects of obscenity. These secondary effects have been the focus of much research. Some of the research has been described above, such as the research looking at degrading or violent sexually explicit material. The premise behind these concerns is that viewing material that is sexually violent may lead one to engage in violent or sexually deviant behaviors and hence regulatory procedures are necessary. As indicated above, the research examining such a hypothesis is inconclusive as the effects of viewing such material vary.

Another area concerning secondary negative effects of obscenity looks at the impact of obscene behavior as differentiated from simply consuming obscene materials. Linz, Paul, & Yao (2007) examined the types of harm associated with exotic dance clubs, specifically examining if there were negative secondary effects to the surrounding area, especially examining increases in crime with special attention paid to sexual violence. This study was a multi-cite study, examining four major cities in Ohio. The study examined whether serving alcohol in an exotic dance club heightened level of risk. The authors found no association between establishments serving alcohol and increases in arrests for prostitution, sexual assault or other sexual offenses. In some instances, serving alcohol in exotic dance clubs was inversely correlated with an increase in the aforementioned crimes. The authors postulated several theories for this negligible impact on crime. They suggest that perhaps crimes are underreported because of the stigma associated with exotic dance clubs. Further, they discuss that because these clubs are under such strict scrutiny by the community, the owners may tend to be more cautious and employ greater safety tactics such as increased lighting in the parking lots and increased security. Similarly, because these clubs tend to be subject to more attention, it is possible that public agents spend more time policing these areas, which may serve as a deterrent for criminal behavior.

The above study is just a sample of the types of research that have been conducted in this area. Because defining the community of those accessing sexually explicit material online may be so challenging, law and policy makers looking to regulate such material may point to negative secondary effects as reason for such policies. When considering Internet sexual activity, research regarding the negative secondary effects will need to

examine more idiographic negative effects than the previous studies because Internet sexual activity occurs in more private settings. Therefore, the outcomes measured will not be related to increased criminal activity, but more related to increased propensity towards violent behavior. Therefore, in order to provide support or negate such claims, research in this area can help to determine if exposure to sexually explicit material online does have a negative impact on behavior.

CHAPTER 6: The Present Study

Research in this area has tended to focus on either the effects of exposure to sexually explicit material or characteristics related to accessing this material. However, the characteristics generally researched have not looked at forensically relevant variables. Of interest is the relationship between use of sexually explicit material and sexually aggressive behavior. As indicated above, there has been minimal research done looking at individuals convicted of a sexual offense. There is even less research examining the relationship between sexually explicit material and sexually coercive behavior.

Sexually coercive behavior refers to the nonphysical tactics used to gain sexual contact with a nonconsenting partner (DeGue & DiLillo, 2004; DeGue & DiLillo, 2005; Craig, Kalichman & Follingstad, 1989; Lisak & Ivan, 1995). Studies show that 15% to 69% of college males report utilizing coercive techniques in order to engage in sexual acts with a non-consenting female (Malamuth, Sockloski, Koss, & Tanaka, 1991; Koss & Gidycz, 1985; Mosher & Anderson, 1986). Further, researchers have identified that there are attitudinal, behavioral and personality differences between sexually coercive and sexually non-coercive men (DeGue & DiLillo, 2004). With respect to sexually explicit material, Lohr, Adams and Davis (1997) examined the effects of exposure to erotic stimuli and found differences in physiologic arousal between sexually coercive and sexually non-coercive men. However, no study to date has examined personality characteristics, coercive behavior and use of sexually explicit material online. This study seeks to extend what is known about behavioral and attitudinal differences between these groups, by specifically examining use of and feelings towards online sexually explicit material. As such, personality and attitudinal characteristics, well-studied in the literature

will be included as well as new behavioral measures of Internet use for sexually explicit material.

6.1 Personality Characteristics

In the literature regarding sexual aggression, psychopathy and empathy have consistently emerged as predictors (Lisak & Ivan, 1995). Psychopathy is a term used to describe certain interpersonal, affective and behavior characteristics, such as superficial charm, promiscuity poor affect and lack of empathy. Psychopathy is of particular concern because of its high association with future criminal behaviors as well as association with poor treatment response (Harris, Rice, & Cormier, 1991; Seto & Barbaree, 1999). Consistent with individuals with a history of sexual aggression, DeGue and DiLillo (2004) found that sexually coercive individuals also scored higher on measures of psychopathy.

Psychopathic individuals are noted to have decreased empathy for others. Empathy has been identified as having three stages: perspective taking, emotional response to other, and response decision (Bumby, 1996). Of particular importance is the response decision phase, because with respect to sexual aggression, this is the point at which one would chose whether to engage in offending behavior. A lack of empathy may make one more likely to continue with aggressive behavior. With respect to coercion, DeGue and DiLillo (2004) found that sexually coercive men scored higher on measures of empathic deficits, suggesting a lower overall ability to empathize with others. Because of the greater degree of anonymity associated with accessing sexually explicit material online, it is necessary to examine if empathic deficits exist and serve as a pathway for sexually coercive behaviors.

6.2 Attitudinal Variables

The literature on examining sexual coercion has studied attitudinal variables that have also been of interest in the literature examining sexually explicit materials. These variables include adversarial sexual beliefs, such as belief in rape myths, attitudes towards women and acceptance of interpersonal violence. As indicated above, belief in rape myths has been associated with use of sexually explicit material. Similarly, endorsement of adversarial sexual beliefs, have been associated with sexual aggression in men (Hines, 2007; Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001; Abbey, McAuslan, & Ross, 1998; Koss and Gidycz, 1985; Malamuth & Check, 1985). Adversarial sexual beliefs have also been studied in samples examining sexually coercive men and studies have found that sexually coercive men also endorsed more items consistent with adversarial sexually beliefs, indicative of beliefs that violence is permissible in relationships and distrust of women (DeGue & DiLillo, 2004; Carr & VanDeusen, 2004). Since adversarial sexual beliefs have been found to increase as a result of exposure to sexually explicit material, it is important to observe if this increase is present after exposure to similar material online because of its association with sexually coercive behaviors.

6.3 Behavioral Characteristics

Previous research has examined a variety of behavior characteristics and found that various factors relate to sexually coercive behavior. For example, use of alcohol and pornography have be found to be significant predictors of perpetration of sexual violence (Carr & VanDeusen, 2004; Abbey et al., 2001). Additionally, higher levels of generalized aggression, delinquency, and sexual promiscuity have been associated with sexually

coercive behavior (DeGue & DiLillo, 2004). The one study (Carr & VanDeusen, 2004) that has examined pornography in sexually coercive individuals, used five items measuring frequency of use of Internet images, pornographic magazine, videos and films, phone sex, and visiting strip clubs, but did not extensively tease apart the type of material viewed (e.g. violent vs. non-violent content).

6.4 Research Question

Although there is extensive research on certain variables associated with Internet use, such as loneliness and extroversion, and research examining the effects of exposure to sexually explicit materials, there is little research tying forensically relevant variables to an individual's choice of whether to view sexually explicit content online and the nature of the content they are choosing to view. These forensically relevant attitudes include psychopathic characteristics, empathic deficits, attitudes endorsing interpersonal aggression and hostility, and sexual compulsivity. The purpose of this study is to examine the use of, rather than the effect of exposure to, sexually explicit material among a college sample.

The present study is a replication and extension of previous work. To identify that empathic deficits and attitudinal beliefs differ in sexually coercive versus non-coercive men, measures used in previous research will be included. Further, measures designed to examine Internet sexual compulsivity and use of sexually explicit material online are included. The purpose of this study is to distinguish the usage patterns of sexually coercive and non-coercive males to explore factors that may translate viewing of sexually explicit material into behavioral outcomes.

6.5 Hypotheses

Based on the literature surveyed above the following hypotheses were tested:

- Individuals who endorse viewing sexually violent or degrading explicit material online are more likely to self-identify as sexually coercive.

- Individuals who endorse viewing sexually violent or degrading explicit material online are more endorse items suggesting attitudes condoning interpersonal aggression.

- Individuals who endorse viewing sexually violent or degrading explicit material online are more likely to endorse items suggestive of empathic deficits or psychopathic characteristic.

- Sexually coercive men are more likely to identify as having a sexual compulsivity with respect to use of the computer to access online material.

- Sexually coercive males will endorse having viewed sexually explicit material prior to engaging in coercive behavior.

- Individuals who endorse watching violent or degrading sexually explicit online material will endorse more characteristics associated with social anxiety.

- Individual who endorse watching violent or degrading sexually explicit online material will endorse more characteristics associated with sensation-seeking.

CHAPTER 7: Methods

7.1 Participants

The sample included 256 male undergraduate students from a large Midwestern university. Participants ranged in age from 19 to 39 ($M = 20.02$, $SD = 2.167$). The sample was 88.6% Caucasian, 3.0% African-American, 1.7% Native American, 4.7% Latino, 1.3% Asian/Pacific Islander, and .8% identified as other. A little over half (57.6%) of the sample identified as single, 14.3% identified as dating, 26.0% indicated they were in a committed relationship, .9% were married, and 1.3% were separated. A majority (65.5%) stated that they had sexual intercourse (defined as penetration). The entire sample endorsed having access to a computer, and 93.6% of the sample stated that they had viewed sexually explicit material online. Participants spent between one to five hours per week ($M = 2.46$, $SD = .754$) using the computer for leisure activities, and between zero to three hours ($M = .94$, $SD = .701$) looking at sexually explicit material online, and between zero to four hours looking at traditional forms of sexually explicit material ($M = .70$, $SD = .63$). None of the participants indicated that they had been convicted of a sexual crime.

7.2 Measures

Sexual Experiences Questionnaire (SEQ; Lisak & Roth, 1988; see Appendix B). The SEQ is a modified version of the Sexual Experience Survey (Koss & Oros, 1982). Both measures examine various tactics used to obtain sexual contact, such as lies, drug or alcohol impairment and threats. However, the SEQ includes more specific items regarding the nature of the threatening behavior used. The measure is a 29-item instrument that asks respondents to rate items on a 5-point Likert scale from 1 = never to 5 = often. Test-retest item agreement is not available for the SEQ but was 93% for the

SES (Koss & Gidycz, 1985). Lisak and Roth (1988) report adequate validity for the sample. The alpha coefficient for the present sample was .84.

Psychopathy Personality Inventory – Revised (PPI-R; Lilienfeld, 2005; see Appendix C). The PPI-R is a 154-item self-report measure of personality traits associated with psychopathy. Items are rated on a 4-point scale ranging from 1 = false to 4 = true. A total score and two factor scores, Self-Centered Impulsivity (SCI) and Fearless Dominance (FD) are yielded. Additionally, scores can be calculated for eight contents scales: Machiavellian Egocentricity (ME), Social Influence (SoI), Coldheartedness (CH), Carefree Nonplanfulness (CN), Fearlessness (FL), Blame Externalization (BE), Rebellious Nonconformity (RN), and Stress Immunity (SI). There are also three validity scales used to screen for random or untrue responding: Virtuous Responding, Deviant Responding and Inconsistent Responding. Satisfactory internal consistency ($\alpha > .80$) has been found in community/college sample for the total score. All content scales have also shown satisfactory internal consistency with the exception of the Coldheartedness scale ($\alpha = .78$). Test-retest stability ranged from $r = .82$ to $r = .95$ and was evaluated over an average period of 19.94 days. The alpha coefficient for the total score for this sample was .91. Reliability for the SCI factor was .90 and .87 for the FD factor. Alpha coefficients for the scales ranged from .76 (CH) to .86 (FL and BE).

Interpersonal Reactivity Index (IRI; Davis, 1980, 1983; see Appendix D). The IRI is a 28-item scale designed to measure empathy. Items are scores on a 5-point Likert scale, ranging from 1 = strongly agree to 5 = strongly disagree. There are four subscales: Perspective-Taking (PT), Empathic Concern (EC), Fantasy (F) and Personal Distress (PD). The Perspective-Taking scale evaluates an individual's ability to take another's

point of view when dealing with other people. The Fantasy scale measures the tendency to transpose oneself into fictional situations. The Empathic Concern scale evaluates the degree to which one feels warmth, compassion and concern for other individuals. Finally, the Personal Distress scale measures ones negative reactions (i.e. feelings of discomfort) in response the emotion displayed by others. Alpha coefficients for this study ranged from .71 to .77 for the scale and test-retest coefficients ranged from .62 to .71.

Rape Scale (RS; Bumby, 1996; see Appendix E). The RS is a 36-item self-report instrument that yields a total score indicating higher acceptance of cognitive distortions associated with sexual offending. Participants respond to items on a 4-point scale anchored from *1 = strongly disagree* to *4 = agree*. The RS has strong internal consistency (α =.96) and the test-retest correlation was .86 over a two-week period. The alpha coefficient for the present sample was .94.

Hostility Toward Women Scale (HTW; Lonsway & Fitzgerald, 1995 derived from Check, 1985; Check, Malamuth, Elias, & Barton, 1985; see Appendix F). The HTW is a 10-item measure designed to address negative attitudes towards women. This measure was derived from the original 30-item scale in order to clarify the wording of some of the items and simplify the measure. Items are rated on a 7-point Likert scale from 1 = strongly disagree to 7 = strongly agree. The ten items had an alpha value of .78-.83 (Lonsway & Fitzgerald, 1995). The alpha for this sample was .73.

Acceptance of Interpersonal Violence (AIV; Burt, 1980; see Appendix G). This is a six-item scale designed to measure one's endorsement of violence and coercion as proper way to engage in interpersonal interactions. Participants rate items on a 7-point Likert scale, from 1 = strongly agree to 7 = strongly disagree. The alpha coefficient for

this scale was a moderate .59, however, this was found to be highly related to rape myth acceptance (Burt, 1980). The alpha for the present sample was .70.

Internet Sex Screening Test (ISST; Delmonico, 1997; Delmonico & Miller, 2003; see Appendix H). The ISST is a 25-item self-report inventory designed to screen for sexually compulsive online behaviors. Participants rate items as either true or false. Factor analysis revealed five factors. Online Sexual Compulsivity (SC), which is a measure of an individual's online sexual problems. Online Sexual Behavior-Social, which is a measure of one's tendency to engage with people on the Internet for sexual purposes (e.g. sex-related chat rooms). Online Sexual Behavior-Isolated (SBI), is a measure of one's tendency to engage in solitary sexual behavior. Online Sexual Spending (SS) is a measure of one's tendency to spend money on online sexual pursuits (i.e. joining a group). Finally, Online Sexual Behavior (SB) is a measure on one's tendency to use the computer for any sexual purpose. Alpha coefficients for the five factors are low, and range from .51-.86. However, the Online Sexual Compulsivity factor has the highest alpha. The alpha for the total score for the present sample was .82. Alpha coefficients for the scales ranged from .54 (SB) to .74 (SBI).

Use of Online Sexually Explicit Material (see Appendix I). A measure designed by the author was included in order to measure the frequency and type of sexually explicit material accessed as well as behaviors associated with use of sexually explicit material. Several items asked about attitudes towards use of the Internet to access sexually explicit material. Some of the items also examined traditional (offline) use of sexually explicit material. This measure included demographic characteristics as well.

Brief Fear of Negative Evaluation (BFNE; Leary, 1983). The BFNE is a 12-item self-report scale which measures fear of negative evaluation, a construct closely associated with social anxiety. Items are rated on a 5-point Likert scale. Internal consistency has been shown to range from .90 to .91, and test-retest reliability is $r = .75$. The alpha coefficient for this sample was .89.

Zuckerman Sensation Seeking Scale (ZSSS; Zuckerman, Kolin, Price, & Zoob, 1964). The ZSS is a 40-item instrument consists of four factors: Thrill and Adventure Seeking (TAS); Experience Seeking (ES); Disinhibition (DI); and Boredom Susceptibility (BS). Each factor contains ten items designed to measure individual differences for optimal levels of arousal and stimulation. For each item, participants select one of two statements that most accurately reflects their typical behavior.

7.3 Procedure

Participants were recruited from undergraduate psychology courses in exchange for course credit. Individuals registered through an online system, and then e-mailed the investigator for a link to the study. The study was created using SurveyMonkey.com and individuals were linked to an informed consent form prior to beginning the survey. Once they completed the informed consent, they were directed to a separate website, with a series of self-report questionnaires. This method allowed individuals informed consent to be stored in a database separate from their responses. Participants were allowed to respond from home or university computers, at their leisure. Data were collected from January 2009 to December 2009. Participation was expected to take approximately 90 minutes. When finished with the survey, participants were directed away from the

website. All data were downloaded into a Microsoft Excel file and converted to an SPSS

file. Approval was obtained from the Institutional Review Board.

CHAPTER 8: Results

8.1 Data Cleaning

Participants were excluded from analyses if more than five percent of their data was missing, reducing the sample from 256 to 237 participants. Where possible, means replacement was also be used for participants who failed to provide answers to various single items across the measures employed in this research project.

8.2 Data Classification

For the purposes of comparison, the sample was divided into three groups for some of the analyses. Individuals who provided a numeric answer of two (indicating have engaged in the behavior at least one time) or above on any of questions 20-23 were coded in the sexually coercive group. These items ask participants to endorse whether or not they have engaged in manipulative sexual behaviors (e.g. obtaining consent from a partner who was intoxicated). Individuals were classified as sexually aggressive, if provided a numeric answer of 2 or above for questions 24-29. These items address forceful sexual behaviors (e.g. use of physical force to obtain partner for sexual activity). Individuals who did not endorse any of these items were classifies as non-sexually coercive or aggressive. If an individual identified as engaging in both sexually coercive and sexually aggressive behavior, the individual was categorized into the sexually aggressive group. Of the sample, 119 (50.2%) were classified as not sexually coercive or aggressive, 61 (25.7%) were classified as sexually coercive, and 45 (19.0%) were classified as sexually aggressive. These numbers are consistent with those that other researchers have reported (Malamuth et al., 1991; Koss & Gidycz 1985; Mosher &

Anderson, 1986). Sample demographics are reported in Table 1, self-reported usage is
outlined in Table 2.

As another method of classification, participants were divided into four groups
based on their endorsement of the items asking if they had watched films involving a
woman in a degrading role or files that involve violent sex. If they endorsed watching
both types of material, they were placed into another category, resulting in four final
categories, viewing neither violent nor degrading material ($n = 188$, 79%), viewing
degrading material ($n = 11$, 4.6%), viewing violent material ($n = 4$, 1.7%) or viewing
both violent and degrading material ($n = 33$, 14.0%).

Table 1

Demographic Data by Group

	Not Sexually Coercive or Sexually Aggressive ($n = 119$)	Sexually Coercive ($n = 61$)	Sexually Aggressive ($n = 45$)
Age (years)	19.85 (1.67)	20.42 (2.98)	20.10 (2.27)
Ability to Use a Computer (rated between 1-5)	4.17 (.75)	4.10 (.83)	4.18 (.68)
Daily Hours Spent on the Computer for Leisure	2.44 (.70)	2.36 (.68)	2.60 (.92)
Daily Hours Spent Looking at Sexually Explicit Material	.93 (.70)	.90 (.66)	.98 (.76)
Ethnicity (%)			
Caucasian	88.9	90.2	91.1
African-American	3.4	1.6	2.2
Latino/a	6.8	0	0
Native American	0	3.3	4.4

Asian/Pacific Islander	0	3.3	2.2
Other	.8	1.6	0
Relationship Status (%)			
Single	58.8	54.1	53.5
Dating	11.8	18.0	16.3
In a committed relationship	26.9	24.6	23.3
Married	.8	0	2.3
Separated	0	1.6	4.7

Table 2

Self-Reported Usage by group

	Not Sexually Coercive or Aggressive	Sexually Coercive	Sexually Aggressive
Endorse viewing Sexually Explicit Material Online (%)	90.7	98.3	95.6
Types of Sites (%)			
Free	81.4	96.7	93.0
Charge a Fee	2.5	1.6	2.3
Actors in the Material (%)			
Female/Male	63.6	77.0	77.8
Female/Female	39.0	57.4	66.7
Male/Male	1.7	4.9	0
Age of Actors in the Material			
18	36.4	49.2	60.0
19-22	75.4	88.5	82.2
22-30	60.2	65.6	75.6
31-60	11.9	14.8	24.4
60 and over	.8	3.3	2.2

Watching Audience

Alone	82.2	95.1	86.7
Friends	11.0	8.2	20.0
Significant Other	4.2	8.2	6.7
films of penile-vaginal penetration	60.2	72.1	73.3
films of oral sex	42.4	68.9	68.9
films of digital (finger)-vaginal penetration	32.2	41.0	57.8
films of penile-anal penetration	29.7	42.6	60.0
films involving two males and one female	20.3	34.4	35.6
films involving two females and one male	39.8	57.4	66.7
films involving group sex (orgy)	11.0	23.0	26.7
films involving multiple males and one female	10.2	19.7	17.8
films depicting fantasy portrayal	18.6	31.1	35.6
films depicting bondage	9.3	9.8	13.3
films showing a man ejaculating on his partner	11.9	24.6	26.7
films depicting a woman in a dominatrix role	9.3	9.8	11.1
films depicting sexual fetishes	8.5	13.1	6.7
films showing "soft-core" images	11.9	19.7	15.6
films involving a woman in a submissive role	12.7	16.4	17.8
films involving a woman in a degrading role	16.9	11.5	20.0
films that involve forced intercourse	14.4	8.2	17.8

8.3 Hypothesis Driven Analyses

To test the first hypothesis, that individuals who endorse viewing sexually violent or degrading explicit material online are more likely to self-identify as sexually coercive, Chi-square analyses were conducted. Analyses were run between the three groups (not

sexually aggressive or coercive, sexually coercive, or sexually aggressive) and self-reports of watching degrading (subjective opinion as to what constitutes degrading material) sexually explicit material or violent sexually explicit material (defined as rape). Results of this analysis revealed a non - significant relationship between any of the groups on type of material viewed, $\chi^2 (6) = 3.48$, $p = .75$. When the three groups where condensed into two groups (not sexually aggressive or coercive and sexually aggressive or coercive) results were still not significant, $\chi^2(3) = 1.11$, $p = .78$.

To test the second hypothesis, a multivariate analysis of variance (MANOVA) was conducted examining individuals who endorse viewing sexually violent or degrading explicit material online and measures of attitudes condoning interpersonal aggression (RS, AIV, HTW). Results did not indicate a significant multivariate difference, $F (9, 538) = 1.57$, $p = .121$. Means and standard deviations for the four groups are reported in Table 3.

Table 3

Means and standard deviations for attitudinal variables

	Neither		Violent		Degrading		Both	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
RS	63.32	15.26	80.00	24.98	63.73	13.66	62.97	14.13
AIV	33.87	5.41	28.5	9.81	31.64	9.25	32.27	7.15
HTW	32.93	8.35	33.50	4.20	32.09	8.61	33.70	8.85

Note: RS = Rape Scale; AIV = Acceptance of Interpersonal Violence, HTW = Hostility Toward Women

Another MANOVA was conducted to test the third hypothesis, examining individuals who endorse viewing sexually violent or degrading explicit material online

and assessments of empathic deficits or psychopathic characteristics. Multivariate differences via MANOVA were revealed, $F (6, 226) = 2.51$, $p = .02$, $\eta_p^2 = 15.08$. Univariate results revealed that users of sexually violent or degrading material could be distinguished from non-users on the IRI, but not on the PPI (see Table 4). Follow-up comparisons revealed that IRI scores for individuals who used both violent and degrading sexually explicit material were significantly lower than the scores for those individuals who did not use any type of sexually explicit material, $F (3,224) = 3.679$, $p = .013$, $\Phi = .80$, but were not significantly different than those who reported using only violent or only degrading material.

To examine this relationship further, the total scores were replaced in the MANOVA analysis with the four scales from the IRI and the eight scales of the PPI. Results revealed a non-significant relationship, $F (36, 606) = 45.42$, $p = .13$, $\eta_p^2 = .07$. Breaking these results down further, a MANOVA with only the IRI scales revealed a significant relationship, $F (12, 563) = 2.34$, $p = .01$, $\eta_p^2 = .04$. Univariate analyses indicate significant differences on the fantasy subscales, with perspective taking reaching an almost significant level ($F (3, 231) = 2.64$, $p = .051$), but not resulting in meaningful mean differences (see Table 4). Fantasy subscale scores were significantly higher for those who endorsed viewing neither violent nor degrading material than those who endorsed viewing both violent and degrading material. There were no significant differences for those who endorsed viewing only violent or only degrading sexually explicit material. A similar MANOVA with only the PPI scales did not reveal a significant relationship, $F (24, 653.17) = .67$, $p = .88$, $\eta_p^2 = .02$. Means and standard deviations for the scales are presented in Table 4.

A final MANOVA was conducted, examining the IRI scales, and the PPI factors, resulting in a significant model, F (18, 597) = 1.74, p = .03, η_p^2 = .05. A follow-up for the IRI scales is described above, and the follow-up MANOVA for the PPI factors did not reveal a significant difference, F (6, 462) = 1.24, p = .28, η_p^2 = .02 (see Table 4).

Table 4

MANOVA results examining use of sexually explicit material and empathic deficits and psychopathic characteristics

	Neither		Violent		Degrading		Both		F	*p*
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*		
IRI Total	72.80	11.51	66.22	3.14	70.91	16.81	65.24	12.87	3.68	.01*
PPI total	297.83	29.05	331.14	33.77	204.75	32.86	301.96	36.77	1.07	.36
IRI-PT	16.29	4.58	12.50	.71	17.73	4.94	14.99	4.36	2.64	.05
IRI- EC	15.90	3.73	15.00	2.83	15.91	4.61	16.06	4.66	.01	.99
IRI-F[1]	18.19	5.76	14.42	2.24	13.82	4.98	13.81	5.97	7.72	.00*
IRI-PD	22.79	4.55	24.00	1.41	23.45	4.70	21.18	3.83	1.32	.27
PPI-ME	43.84	7.68	44.00	8.49	45.55	7.20	45.00	7.64		
PPI-RN	33.66	7.41	44.00	9.90	37.27	8.17	34.57	8.73		
PPI-BE	30.59	6.68	34.14	.20	31.75	8.54	33.26	7.60		
PPI-CN	37.18	7.29	45.00	5.66	37.27	5.80	37.75	8.01		
PPI-SoI	47.04	7.31	50.00	5.66	45.73	5.92	45.56	8.60		
PPI-FL	37.09	7.99	45.50	9.19	39.27	8.64	37.63	9.29		
PPI-SI	34.88	5.88	35.50	10.61	35.91	5.94	34.58	5.93		
PPI-CH	33.41	5.58	33.00	4.24	32.00	5.93	34.13	6.19		
PPI-SCI	144.91	21.86	168.07	10.96	151.84	22.68	150.91	26.03		
PPI-FD	119.15	15.71	128.00	15.10	120.91	13.78	118.95	16.12		

*p < .05, **p < .001

Note: [1] denotes significant differences between the Neither and the Both group; IRI total = total score on the IRI; PPI total = total score on the PPI-R; IRI-PT = score on the perspective-taking scale of the IRI; IRI-EC = score on the empathic concern scale of the IRI; IRI-F = score on fantasy scale of the IRI; IRI-PD = score on the personal distress scale of the IRI; PPI-ME = score on the Machiavellian Egocentricy scale of the PPI-R; PPI-RN = score on the Rebellious Nonconformity scale of the PPI-R; PPI- BE = score on the Blame Externalization scale of the PPI-R; PPI-CN = score on the Carefree Nonplanfulness scale of the PPI-R; PPI-SoI = score on the Social Influence scale of the PPI-R; PPI-FL = score on the Fearlessness scale of the PPI-R; PPI-SI = score on the Stress Immunity scale of the PPI-R; PPI-CH = score on the Coldheartedness scale of the PPI-R; PPI-SCI = score on the Self-Centered Impulsivity factor of the PPI-R; PPI-FD = score on the Fearless Dominance factor of the PPI-R.

To test the fourth hypothesis, that sexually coercive men are more likely to report compulsively viewing sexually explicit material online, an Analysis of Variance (ANOVA) was conducted. In this analysis, the independent variable was whether the individual identifies as sexually aggressive, sexually coercive, or neither and the dependent variable was the total score on the ISST. Results indicate a significant difference between groups, $F (2, 221) = 4.34$, $p = .014$. Tukey post hoc tests indicated the sexually aggressive individuals differed from the sexually coercive and the not sexually coercive or sexually aggressive individuals (see Table 5). A similar analysis was conducted examining the sexual compulsivity scale of the ISST as the dependent variable. Results indicate a significant relationship $F (2, 216) = 10.56$, $p = .00$, with follow-up analyses indicating significant differences between the sexually aggressive group and the other two groups (see Table 5). A MANOVA was conducted using the same independent variable, and the scales of the ISST as the dependent variable. Results indicate a significant difference, $F (10, 428) = 2.36$, $p = .01$. Follow up univariate analyses for each scale indicate significant mean differences on the online sexual compulsivity scale, $F (2, 220) = 5.01$, $p = .01$, on the online sexual behavior social scale $F (2, 220) = 3.97$, $p = .02$, and on the online sexual behavior isolates, $F (2, 220) = 5.98$, p

< .00. Tukey post hoc analyses revealed a significant mean difference between those who reported engaging in sexually aggressive behavior and the not sexually coercive or sexually aggressive and the sexually coercive groups on the online sexual compulsivity scale. For the online sexual behavior social scale, differences were noted between the sexually aggressive group and the not sexually aggressive or coercive group, but the sexually coercive group did not differ significant from the other two groups. A similar pattern was revealed for the online sexual behavior - isolates scale (see Table 5).

Table 5

Univariate and Multivariate results examining sexually coercive behavior and sexual compulsivity

	Sexually Aggressive		Sexually Coercive		Not Sexually Aggressive or Coercive		F	*p*
	M	*SD*	*M*	*SD*	*M*	*SD*		
ISST total[1]	33.73	4.04	31.12	4.10	30.63	3.59	10.59	.000*
ISST- SC[2]	7.82	1.76	7.10	1.47	7.12	1.26	4.34	.014*
Multivariate Results								
ISST- SC[3]	7.82	1.76	7.05	1.43	7.09	1.22	5.01	.01*
ISST- SBS[4]	6.07	1.23	5.62	1.04	5.58	.88	3.97	.02*
ISST- SBI[5]	7.41	1.02	6.98	1.37	6.63	1.35	5.98	.00**
ISST- SS	3.41	.73	3.57	.63	3.19	.52	2.20	.11
ISST- ISB	2.36	.61	2.15	.40	2.20	.53	2.36	.10

 *p < .05, **p < .001
Note: [1] denotes significant differences on Tukey post-hoc tests between all three groups; [2] denotes significant differences on Tukey post-hoc tests between all three groups; [3] denotes significant differences on Tukey post-hoc tests between all three groups; [4] denotes significant differences on

Tukey post-hoc tests between the Sexually Aggressive group and the Not Sexually Aggressive or Coercive group; [5]denotes significant differences on Tukey post-hoc tests between the sexually Aggressive group and the Not Sexually Aggressive or Coercive group; ISST total = total score on ISST; ISST-SC = score on the Online Sexual Compulsivity scale of the ISST; ISST-SBS = score on the Online Sexual Behavior-Social scale of the ISST; ISST-SBI = score on the Online Sexual Behavior-Isolated scale of the ISST; ISST-SS = score on the Online Sexual Spending scale of the ISST; ISST-ISB = score on the Online Sexual Behavior scale of the ISST.

To test the final hypothesis that sexually coercive males will endorse having viewed sexually explicit material prior to engaging in coercive behavior, a series of analyses were conducted. In order to gather this information, participants were asked to answer true or false to the following question: "I have forced someone to have sex with me after watching sexually explicit material." Results indicate that only four people answered true. Three of those four admitted to engaging in sexually aggressive behavior and two admitted to engaging in sexually coercive behavior, as measured by the SEQ. Because so few participants endorsed these behaviors, it was not meaningful to run statistical analyses examining these variables.

To examine this concept further a meditational model was conducted, to examine if use of sexually explicit material served as a mediator between the attitudinal variables and sexually coercive behaviors. To conduct the meditational model, the steps proposed by Baron and Kenny (1986) were used. The initial regression between the attitudinal variables and sexually coercive or aggressive behavior was significant, $R^2 = .07$, $F(3, 212) = 5.33$, $p = .001$. Examining the independent variables against the proposed mediator variable (viewing sexually violent or degrading material), produced a non-significant regression, $R^2 = .01$, $F(3, 223) = .041$, $p = .75$. These nonsignificant results indicated that a mediational model was not an accurate representation of the data.

The same steps were followed when considering empathic deficits and psychopathic characteristics. The first step was significant, $R^2 = .11$, $F(6, 202) = 3.96$, p

< .01. The Self-Centered Impulsivity scale of the PPI-R was the only variable that contributed significantly to the model (β = .313, p = .000). Examining the independent variables against the proposed mediator variable (viewing sexually violent or degrading material), produced a significant regression, R^2 = .08, F (6, 213) = 3.10, p = .006. The only variable contributing significantly to the model was the Fantasy scale of the IRI (β = -.254, p = .001).There was not a significant relationship between the proposed moderator (sexually violent or degrading material) and the outcome variable (sexually coercive or aggressive behaviors; R^2 = .01, F (1,222) = .04, p = .85), therefore a mediational model was not an accurate representation of the data.

To examine the role between social anxiety and use of online sexually explicit material, an analysis examining the relationship between viewing online sexually explicit, violent or degrading material and the total score on the BFNE was conducted. Results did not indicate significant results, F (3, 185) = .20, p = .90.

When considering the final hypothesis, the number of participants who completed the Sensation Seeking Scale was slightly smaller (n = 142) than the total sample, and only one person in the sample endorsed viewing violent material, therefore the sample was spilt into either having watched violent or degrading material or not having watched either type. When examining this against the total score on the SSS, results were not significant, F (1, 140) = 1.58, p = .21. A MANOVA, using the scales of the SSS also yielded nonsignificant results, F (4, 137) = .70, p = .59.

8.4 Exploratory Analyses

In order to further explore the data, additional analyses were conducted. In the first analysis, the ISST was examined in relation to type of material viewed (sexually

violent or degrading). It was expected that individuals scoring higher on this measure would endorse viewing sexually violent or degrading material online. In the first, an ANOVA was run, examining the total score of the ISST in relation to viewing sexually explicit or degrading material. Results indicate a significant difference between groups, $F(3, 226) = 4.94$, $p < .001$. Tukey post hoc tests indicate that individuals who endorse viewing both types of sexually explicit material score significantly higher on the ISST than those who do not endorse viewing either type of material (see Table 6). A MANOVA was conducted using the same dependent variable, and the scales of the ISST as the independent variable. Results indicate a significant difference, $F(15, 618) = 2.06$, $p = .01$, $\eta_p^2 = .04$. Follow up univariate analyses for each scale indicate significant mean differences on the online sexual compulsivity scale, $F(3, 231) = 3.81$, $p = .01$. Tukey post hoc analyses reveal a significant mean difference between those who do not endorse viewing violent or degrading sexually explicit material and those who endorse viewing violent material, but not for those who endorsed viewing only degrading material or for those who endorsed viewing both types of material (see Table 6). Another significant univariate ANOVA, $F(3, 232) = 4.46$, $p = .01$, revealed that individuals who endorsed viewing both types of sexually explicit material, had higher scores on the scale examining isolative online sexual behavior than those who did not endorse viewing either type of material (see Table 6). Univariate analyses examining the other subscales did not reveal significant results (see Table 6).

Table 6

ANOVA results examining use of sexually explicit material and sexual compulsivity

	Neither		Violent		Degrading		Both		F	*p*
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*		

	M	SD	M	SD	M	SD	M	SD	F	p
ISST total[1]	30.93	3.97	33.25	6.24	33.09	3.21	33.45	3.19	4.94	.00*

Multivariate Results

	M	SD	M	SD	M	SD	M	SD	F	p
ISST-SC[2]	7.11	1.41	9.00	1.83	7.82	1.24	7.55	1.35	3.81	.01*
ISST-SBS	5.68	1.06	5.75	.96	5.64	.81	6.12	1.02	1.67	.18
ISST-SBI[3]	6.73	1.36	6.25	2.06	7.36	1.21	7.54	.83	4.46	.01*
ISST-SS	3.24	.21	3.25	.50	3.36	.67	3.39	.70	.65	.59
ISST-ISB	2.20	.49	2.50	1.00	2.36	.50	2.24	.56	.83	.48

*p < .05, **p < .001
NOTE: [1] denotes significant differences on Tukey post-hoc tests between the Neither group and the Both group; [2] denotes significant differences on Tukey post-hoc tests between the Neither group and the Violent group; [3] denotes significant differences on Tukey post-hoc tests between the Neither group and the Both group; ISST total = total score on ISST; ISST-SC = score on the Online Sexual Compulsivity scale of the ISST; ISST-SBS = score on the Online Sexual Behavior-Social scale of the ISST; ISST-SBI = score on the Online Sexual Behavior-Isolated scale of the ISST; ISST-SS = score on the Online Sexual Spending scale of the ISST; ISST-ISB = score on the Online Sexual Behavior scale of the ISST.

Given the lack of research in this area, a measure was created to assess use of sexually explicit material. In the previous analyses, the use of violent, degrading, both, or neither was based on individual items. However, participants also answered questions regarding the various types of material used as well as behaviors that they engaged in during or after viewing the material (see Appendix I for items). The following results represent further exploration with the instrument. To ensure that participants were attending to each item, the same item was presented twice, with slightly different wording (true/false items seven and nine). Correlation results indicate a near perfection

correlations, $r = .92$, $p = .00$, suggesting that individuals were in fact reading the items presented. The 17-items asking participants whether they viewed a particular type of material were summed, with one point awarded if the participant endorsed viewing the material, with higher scores indicating endorsing viewing more types of sexually explicit material. The alpha coefficient for these 17-items was .90, suggesting good reliability. An exploratory factory analysis was conducted in order to see if the various type of sexually explicit material could be broken down into different factors. Using a varimax rotation results revealed three factors accounting for 66.9% of the variance. One factor could be referred to a mainstream heterosexual pornography ($\alpha = .81$), the second factor captures items related to group sex and fantasy ($\alpha = .88$), and the third factor captures items related to fetishes ($\alpha = .88$). Table 7 displays how the items loaded onto the three factors.

Table 7

Factor Loading for Varimax Orthogonal Three-factor Solution Type of Material Items

	Factor Loading		
Item	1	2	3
1. films of penile-vaginal penetration	-.237	.050	**.684**
2. films of oral sex	-.092	.122	**.769**
3. films of finger-vaginal penetration	.272	.139	**.608**
4. films involving penile-anal penetration	.253	.095	**.750**
5. films involving two males and one female	.495	.111	**.516**
6. films involving two females and one male	.127	.191	**.778**
7. films involving group sex	.198	**.763**	.282

8. films involving multiple males and one female	.510	**.634**	.172
9. films depicting fantasy portrayal	.095	**.781**	.226
10. films depicting bondage	**.766**	.495	-.026
11. films showing a man ejaculating on his partner	.269	**.760**	.220
12. films depicting a woman in a dominatrix role	**.741**	.468	.017
13. films depicting sexual fetishes	**.691**	.537	-.034
14. films showing "soft-core" images	.324	**.650**	-.007
15. films involving a woman in a submissive role	**.600**	**.615**	.079
16. films involving a woman in a degrading role	**.849**	.145	.207
17. films that involve forced intercourse	**.846**	.219	.087

An ANOVA examining the scores on these 17-items for individuals classified as sexually aggressive, sexually coercive, or neither, revealed a significant relationship, $F(2, 221) = 5.16$, $p = .01$. Tukey follow-up results indicate that there was a significant mean difference between the not sexually coercive or aggressive group ($M = 3.59$, $SD = 4.15$) and the sexually aggressive group ($M = 5.71$, $SD = 4.10$). There were no significant differences when considering the sexually coercive group ($M = 5.03$, $SD = 4.21$) in comparison with the other groups.

The 19 true-false items relating directly to behavior were then summed with one point awarded for answers of true, and zero points given for answers of false, resulting in higher scores for individuals who endorsed using the Internet for a variety of dating and sexual purposes. The last five true/false items were not directly related to behaviors and

therefore were not included in the summary. The alpha coefficient for these items was

.72. An exploratory factor analysis using a varimax rotation, revealed seven factors

accounting 65.24% of the variance (see Table 8). The initial eigenvalues showed that the

first factor explained 20.48 of the variance, the second factor 12.14% of the variance, and

the third factor 8.52% of the variance. The fourth, fifth, sixth, and seventh factors had

eigenvalues over one and each explained between 5 and 7% of the variance. The factor

loading matrix for the final solution is presented in Table 5. Because of the small number

of items and the large number of factors produced, interpretation of the seven factors is

conceptually difficult. In addition, several items had multiple factor loadings. The first

factor, accounting for the largest proportion of variance, consists of items directly to

engaging in sexual behavior whereas the second factor seems to relate more to viewing

sexually explicit material. The third factor relates to anonymity and shame regarding

watching sexually explicit material. The remaining factors account for little of the

variance and are not meaningfully interpretable.

Table 8

Factor Loading for Varimax Orthogonal Three-factor Solution For True/False Items

Item	Factor Loading						
	1	2	3	4	5	6	7
I masturbate when I view sexually explicit material.	-.081	.052	.308	**.644**	-.050	.208	.040
My partner and I watch sexually explicit material *together* while engaging in sexual behaviors.	-.024	-.146	.042	.023	.002	.175	**.789**
I watch sexually explicit material to get aroused *before* engaging in sexual behaviors with my partner.	.237	**.357**	.117	-.044	-.573	.299	**.310**

Sometimes, I get so aroused (turned-on) watching sexually explicit material online, I seek a "one-night stand."	.094	.033	-.116	.045	.089	**.682**	.037
I get ideas for different sexual activities based on the content of the material I view online.	-.069	.040	.163	.284	-.088	**.697**	.099
I have wanted to pressure a woman/man to engage in sexual activity based on what I have viewed online.	-.032	**.338**	**.390**	-.025	.041	**.368**	-.026
I have watched sexually explicit material online and then forced someone to have sex with me.	**.835**	.306	.074	.035	-.081	-.031	.172
My partner has been frightened during sexual contact when I have done something I learned online.	.174	.176	.196	-.038	**.687**	.049	.188
I visit sites that allow me to virtually interact with a sexual partner using a web-cam.	.090	.378	.106	.048	**.685**	.079	.079
I visit sites that allow me to watch, in real time, others engaging in daily activities.	.139	**.803**	.100	.100	.184	.058	.029
I enjoy viewing live-streaming of people engaging in sexually explicit behaviors online.	.246	**.802**	-.003	.149	.154	.031	-.066
I have met people online solely for the purposes of meeting offline and engaging in sexual behavior.	.294	.225	-.170	.219	.264	-.073	**.558**
I have broadcast images of myself engaging in sexual behaviors to people I have met online.	**.914**	.044	.048	-.024	.166	.024	-.017
I like to visit chat rooms for the purpose of engaging in cybersex.	**.502**	.319	-.094	.048	.410	.264	-.200
I would be embarrassed if my loved ones found out I view sexually explicit material online.	.155	-.112	**.529**	.195	.008	.218	-.388
The time I spend accessing sexually explicit material online has increased since I first looked at this material.	.062	-.036	.056	**.784**	.113	.199	.019

I have become more uninhibited since I began looking at sexually explicit material online.	.031	.214	.004	**.734**	-.030	-.065	.036
I prefer looking at sexually explicit material on the Internet because the people do not seem as real to me.	.007	-.011	**.783**	.185	.101	-.059	.000
I prefer looking at sexually explicit material on the Internet because I feel distant from the people in the material.	.021	.137	**.854**	.013	.059	-.029	.050

An ANOVA examining the total score on the true/false items and individuals classified as sexually aggressive, sexually coercive, or neither, revealed a significant relationship, $F(2, 206) = 18.09$, $p < .00$. Tukey follow-up results indicate that there was a significant mean difference between all the groups. The not sexually coercive or aggressive group ($M = 5.14$, $SD = 2.74$) scored lower than the sexually coercive group ($M = 6.68$, $SD = 3.00$) and the sexually aggressive group ($M = 6.68$, $SD = 3.67$), and the sexually coercive group scored lower than the sexually aggressive group.

Based on the above analyses all of the total scores and scale scores used to test the hypotheses were entered into a correlational analysis with the total scores on the measures (see Table 9). Total scores were derived by summing the true/false item responses, with higher scores resulting in endorsement of a larger variety of behaviors, and summing the number of types of materials viewed, with higher scores again representing more diversity in viewing patterns.

Table 9.

Correlations between total score of true/false items and measures used in study

	Sum of True/False questions	Sum of types of material questions

1. SSS-total score	.03	.18*
2. SSS-ES	.02	.07
3. SSS-DIS	.02	.08
4. SSS-BS	.08	.03
5. SSS-TAS	-.01	-.02
6. IRI-PT	.01	-.17*
7. IRI-EC	.03	.00
8. IRI-F	-.12	-.32**
9. IRI-PD	-.15*	-.19**
10. IRI-TOT	-.11	-.28**
11. PPI-SCI	.28**	.13*
12. PPI-FD	-.10	.04
13. PPI-Total	.17*	.12
14. PPI-ME	.31**	.18**
15. PPI-BE	.16*	.10
16. PPI-CN	.15	.00
17. PPI- SoI	-.09	.02
18. PPI-FL	.04	.09
19. PPI-SI	-.20**	-.03
20. PPI-CH	.05	-.01

21. ISST-Total	.56*	.41**
22. ISST-SC	.44**	.20**
23. ISST-SBS	.28**	.27**
24. ISST-SBI	.41**	.44**
25. ISST-SP	.31**	.11
26. ISST-SB	.30**	.12
27. RS	.28**	.12
28. AIV	-.26**	-.16*
29. HTW	.29**	.18**
30. BFNE	.16*	.07
31. Sexually Aggressive Behavior	.29**	.21**

*p < .05, **p < .001
NOTE: SSS-total = total score on the SSS; SSS-ES = score on the Experience Seeking scale of the SSS; SSS-DIS= score on the Disinhibition scale of the SSS; SSS-BS = score on the Boredom Susceptibility scale of the SSS; SSS-TAS = score on the Thrill and Adventure Seeking scale of the SSS; IRI-PT = score on the perspective-taking scale of the IRI; IRI-EC = score on the empathic concern scale of the IRI; IRI-F = score on fantasy scale of the IRI; IRI-PD = score on the personal distress scale of the IRI; IRI total = total score on the IRI; PPI-SCI = score on the Self-Centered Impulsivity factor of the PPI-R; PPI-FD = score on the Fearless Dominance factor of the PPI-R; PPI total = total score on the PPI-R; PPI-ME = score on the Machiavellian Egocentricy scale of the PPI-R; PPI-RN = score on the Rebellious Nonconformity scale of the PPI-R; PPI- BE = score on the Blame Externalization scale of the PPI-R; PPI-CN = score on the Carefree Nonplanfulness scale of the PPI-R; PPI-SoI = score on the Social Influence scale of the PPI-R; PPI-FL = score on the Fearlessness scale of the PPI-R; PPI-SI = score on the Stress Immunity scale of the PPI-R; PPI-CH = score on the Coldheartedness scale of the PPI-R; ISST total = total score on ISST; ISST-SC = score on the Online Sexual Compulsivity scale of the ISST; ISST-SBS = score on the Online Sexual Behavior-Social scale of the ISST; ISST-SBI = score on the Online Sexual Behavior-Isolated scale of the ISST; ISST-SS = score on the Online Sexual Spending scale of the ISST; ISST-ISB = score on the Online Sexual Behavior scale of the ISST; RS = Rape Scale; AIV = Acceptance of Interpersonal Violence, HTW = Hostility Toward Women; BFNE = total score on the Brief FNE.

CHAPTER 9: Discussion

9.1 Hypothesis Driven Analyses

This study was the first to examine the relationship between off-line sexually coercive behaviors and online viewing of sexually explicit material. In addition, it was one of the first studies to ask participants in-depth questions about the variety and type of sexually explicit material used. The study initially focused on the use of sexually violent or degrading online material, because of the previous research that has explored the use of this type of material in traditional formats has suggested there may be small, but significant changes in attitudes and behaviors (Malamuth & Ceniti, 1985; Allen, D'Allession & Brezgel, 1995; Seto, Maric & Barbaree, 2001). However, additional exploration of general use of sexually explicit material was explored as well.

The first hypothesis examined the relationship between viewing violent or degrading sexually explicit material and identification of oneself as sexually coercive or aggressive. Results indicate that there were no differences between individuals who reported watching any type of sexually violent or degrading online material and individuals who did not report watching this type of material with respect to sexually coercive behavior. This finding of non-significance is interesting when considered in relationship to past research. Stack, Wasserman and Kern (2004) found that individuals who reported more deviant offline behaviors (such as promiscuity and paying for sex) also reported more frequent use of the Internet. Therefore, there was reason to believe that more deviant online behaviors would be related to more deviant offline behaviors; however the results indicate that this was not the case for the present sample. One explanation for this finding may be that the present sample focused on college students; factors such as promiscuity may not be related to online behaviors in this sample because

viewing sexually explicit material online may be more normative in this age group and promiscuity may also be more acceptable. For example, over 11% of the participants in the sample admitted to watching online sexually explicit material with friends, suggesting that such material may be more socially acceptable, and therefore not as often associated with deviant sexual arousal patterns. Further, as indicated above, the changes in accessibility and affordability of the Internet make certain materials more available and more socially acceptable. Therefore, one reason for the difference in the current results from those found by Stack, Wasserman and Kern (2004), may simply have to do with the five year difference between studies. Perhaps, in those five years, certain online behaviors may have become less taboo and therefore less associated with offline deviant sexual behaviors.

The second hypothesis explored differences in attitudes among those individuals who endorsed viewing sexually degrading or violent material and those that did not. Results for this analysis also revealed non-significant results. While these results were somewhat surprising, given that traditional exposure to sexually violent or degrading material has produced some small but significant effects (Malamuth & Ceniti, 1985; Allen, D'Allession & Brezgel, 1995; Seto, Maric & Barbaree, 2001), it supports the research that has examined exposure to online sexually explicit, but not degrading or violent material (Barak & Fischer, 1997; Barak et al., 1999). The research examining online material has suggested that exposure to such material, including active involvement in the manipulation of the images, does not affect attitudes. Interestingly, previous studies have examined the influence of pre-selected sexually explicit material on attitudes and have not examined idiographic participant use. Therefore, in the present

study, results of previous research were extended, and suggest that in general, use of online sexually explicit material, whether self-selected or pre-selected exposure, will not significantly impact attitudes regarding rape myth acceptance, hostility towards women or acceptance of interpersonal violence. It is notable that the present study did not present sexually explicit material, as previous studies have done, but instead asked about idiographic, non-manipulated use. The differences in methods may account for some of the differences in findings as well.

The third hypothesis examined whether individuals who endorsed viewing sexually explicit violent or degrading material online differed from those who do not watch such material when considering psychopathic characteristics or empathic deficits. These variables were of particular importance because no previous literature has considered the role that such variables may play when considering online use of sexually explicit material. Further, these variables have been shown to be related to offense behavior (Harris et al., 1991; Seto & Barbaree, 1999). Results indicate that individuals differed in terms of empathic deficits but not on psychopathic characteristics. The differences in this relationship were characterized found only in those who reported using both violent and degrading sexually explicit online material; using only one type, violent or degrading, did not result in significant results. These results are particularly interesting because increased psychopathic traits are usually accompanied by increased empathic deficits, whereas in this case, it was the empathic deficits that differed among groups. Perhaps individuals who view violent and degrading sexually explicit online material find are less able to empathize and connect with the individuals being depicted in the explicit material and therefore do not feel or understand the emotions associated with degrading

or violent behavior that individuals without similar empathic deficits feel. Particularly striking about the results, is that when the relationship between viewing sexually explicit or degrading material and empathic traits was explored at a subscale level, it was the Fantasy subscale that emerged as contributing to the significant different. This scale measures the tendency to transpose oneself into fictional situations (Davis, 1980). Therefore, the results suggest that individuals who view violent and degrading sexually explicit material may not be able to identify with the individuals in the scenarios because they are not able to picture themselves in a similar situation and therefore cannot identify the emotions that may be connected to that situation. Therefore, though the empathic deficits emerge, they may not permeate numerous situations which may explain why there is no accompanying spike in psychopathic characteristics. It seems that there may be empathic deficits in some scenarios, but not necessarily in all instances. That is to say, in other situations, that are more tangible perhaps, the individuals who view sexually violent and degrading material may be able to empathize in the same manner as those who do not view such material.

When considering the fourth hypothesis, which tested whether individuals who reported sexually aggressive or coercive offline behaviors identified as being sexually compulsive, results indicated that, as expected, individuals engaging in sexually aggressive behavior endorsed more traits of sexual compulsivity, than individuals who engaged in sexually coercive behavior as well as those individuals who did not endorse engaging in sexually aggressive or coercive behavior. It was further identified that the sexually aggressive group differed from the other two groups on several other scales of the ISST: the social and isolates scales. This finding is almost contradictory in that the

social scale suggests that the individual is using the Internet for socializing type behaviors (i.e. chat rooms about sex) and the isolates scale suggests that the individual is engaging in solitary behavior online. This finding should be explored further in future studies, but may provide support that the two theories for using the Internet proposed by Valkenburg and Peter (2007) are both viable. For example, if applying the rich-get-rich hypothesis, perhaps individuals, who are sexually aggressive in their offline behaviors, utilize the Internet to further the target area in which they can be sexually aggressive. Alternatively, if applying the compensation hypothesis, individuals who have sexually aggressive tendencies, may find increased motivation to complete these behaviors if they utilize Internet material.

The present findings also indicate the possibility of underlying psychopathology or unique psychological needs in sexually aggressive individuals. Seto and Eke (2007) found that Internet offenders were more likely to demonstrate characteristics consistent with the diagnostic category of pedophilia; the present results suggest that there may be continued support for this finding. That is to say, in this study individual's who reported in engaging in sexually aggressive behaviors reported more difficulties with their online sexual behaviors. It is possible then, that these individuals may be showing more signs of psychopathology than individuals who do not engage in sexually aggressive behaviors. For example, perhaps these individuals would show features of paraphilia, impulse control difficulties or compulsive behaviors. The pattern of results suggest that further exploration of individuals who utilize the computer for sexual purposes and engage in more deviant offline behaviors may have unique psychological treatment needs.

When considering the fifth hypothesis, that sexually coercive males will endorse viewing sexually explicit material prior to engaging in sexually coercive behaviors results indicated that very few participants (n = 4), endorsed this behavior. The participants who endorsed viewing material prior to forcing someone to have sex with them, were also the same individuals who endorsed engaging in sexually coercive or aggressive behaviors, so the respondents that did positively endorse this question, were consistent in their response patterns. Based on the few people who did acknowledge this behavior, it is certainly worth exploring this concept further in future research. This variable is of particular interest because of its direct relationship with offending behaviors. If individuals, who endorse engaging in sexually aggressive or sexually coercive behaviors, also endorse viewing sexually explicit material, there may be cause for legal ramifications. Specifically, this would speak to the deleterious effects of watching pornography, which may then lend support for proponents of regulation of online sexually explicit material.

The next hypothesis was not supported. This hypothesis examined whether the use of sexually explicit online material mediated the relationship between certain attitudes and personality characteristics associated with sexually coercive behaviors. Results suggest that the pattern that emerged in previous research (i.e. DeGue & DiLillo, 2004) is not affected by Internet behaviors. One reason for this may be similar to the reasons discussed previously, namely that online behaviors have become socially acceptable and therefore may not have the deleterious effects that viewing offline sexually explicit material has been shown to have in the past.

Examining social anxiety in relation to online behaviors indicated a nonsignificant result between online viewing of sexually explicit violent or degrading material and

scores on the Brief FNE. Given the relationship between social anxiety and other online behaviors (i.e. Campbell, Cumming & Hugh, 2006) it was expected that this variable would relate to viewing of sexually explicit material as well. Perhaps the social anxiety traits influence if one will use the internet, but not if one will use sexually violent or degrading material.

Finally, results of the analyses examining sensation-seeking found no significant results. Peter and Valkenburg (2007) found that their recreation hypothesis, which suggested that individuals high in sensation-seeking would look for casual partners on the internet because of the anonymity it provides, was supported. However, the present results do not find a link between sensation-seeking and online behavior.

9.2 Exploratory Analyses

Due to the lack of significance of some of the hypothesized analyses, a series of exploratory analyses were conducted. The first of these analyses explored the notion of online sexual compulsivity and viewing of sexually violent or degrading pornography. Results indicated that individuals who endorsed viewing both sexually violent and degrading material were more likely to report difficulties consistent with online sexually compulsive behavior. This result was found in individuals who only endorse viewing degrading or violent material, in order for there to be significance the participants had to endorse viewing both. Analyses examining the scales help to explain this pattern.

With respect to sexual compulsivity, there were significant differences between individuals who viewed violent sexually explicit material and those who viewed neither type (violent or degrading) but there were not differences when considering those who viewed sexually violent and degrading material or those who only viewed degrading

material. This scale is fairly broad, and is defined as a measure of an individual's online sexual problems. It is possible that individuals who view only sexually violent material may find that they get aroused by violence and they can find the necessary stimulation to achieve arousal through the Internet, which is a more prosocial outlet than seeking out a partner who enjoys violent sexual activity. However, it is possible that these individuals report their online behavior as compulsive (and self-report it as problematic), either because they can only achieve arousal by viewing this material online and therefore need to use the Internet in order to become aroused or because it is troubling that they view violent material, when it is not necessarily socially acceptable. In the former situation, online viewing of sexually explicit material could reach a problematic level if it was interfering with one's ability to engage in sexual intercourse with a partner. In the latter situation, the online behavior would be problematic because the individual may be experiencing distress over viewing such material or feeling compelled to view such material. It is likely that this relationship will be fleshed out further in future research.

Individuals who endorsed viewing both sexually violent and degrading material significantly differed from individuals who endorsed viewing neither type on the socially isolative scale of the ISST. One explanation for this finding may be that individuals who are viewing a lot of sexually explicit material, or taboo sexually explicit material may not have the time to spend with others, or the desire to let others know that they watch such material. Therefore, they may be more isolative because they are viewing material alone so others do not find out. However, if this were the case, it would intuitively follow that individuals who are only viewing violent or only viewing degrading material would also be more socially isolative as they may not want others to know either. Since this pattern

did not emerge, it would seem that the volume and variety of sexually explicit material has more to do with various socially isolative behaviors than the type of material.

Additional exploratory analyses were conducting using the scales created for the study. When considering the types of sexually explicit material view, initial psychometric data indicated good reliability. A factor analysis revealed three distinct factors: mainstream, heterosexual sexually explicit material, group sex and fantasy sexually explicit material, and fetishistic sexually explicit material. Whereas previous analyses in the present study explored the use of sexually violent or degrading material, analyses were conducted examining the use of variety of material. Results indicate that there was a significant difference between scores regarding the type of material used. Individuals who admitted to sexually aggressive behavior endorsed viewing a wider variety of sexually explicit material than individuals who did not admit to sexually aggressive or coercive behaviors. Perhaps individuals who are sexually aggressive are less discriminating in terms of what stimulates arousal and it is more important that there is something to get the individual aroused.

Similar analyses were conducted for the true/false questions which asked about additional behaviors associated with the use of sexually explicit material. Results for this scale were not quite as strong. The alpha coefficient was lower than desired, suggesting that the items on the scale did not hang together in a meaningful way. This was confirmed by the factor analysis that was completed, which demonstrated no distinct factor structure. These results may explain why there were poor results with respect to the question asking about using sexually explicit material prior to forcing someone to have sex. Perhaps the true/false questions relating to behavior were not an effective means of

asking about the different behaviors associated with viewing online sexually explicit material. It is possible these questions were too face valid, or perhaps that participants felt uncomfortable reporting their behaviors due to the in-depth and personal nature of the questions. There may be a more effective way to identify what behaviors people are engaging in when viewing online sexually explicit material, such as spacing the questions out throughout the survey.

Finally, a total score examining the number of types of material viewed and a total score of the true/false questions, which examined behaviors associated with online viewing of sexually explicit material. Interestingly, more results emerged when looks at the sum of behaviors, than looking at individual behaviors. When examining these results, more of the patterns that were hypothesized were found. Specifically, there were more associations between the measures and the summed score. The most clear relationships emerged between the ISST and HTW. This finding suggests that when you sum the items, the score is related to online sexual compulsivity. This finding is not surprising as the amount of time it takes to look at a variety of material may be greater, therefore one may feel that their behavior is compulsive simply because of the amount of time spent online. Alternatively, one may spend a lot of time online, therefore causing them to look at a wide variety of material. The causality is unknown. Similarly, the direction between the significant finding of the summed variables and hostility towards women is unknown. Perhaps one who holds hostile attitudes towards women is more likely to look at a wide variety of material online, especially if that material includes women. Alternatively, one who looks at a lot of material depicting women in an unflattering light may develop more hostile attitudes. While the results suggest there may

be a benefit to looking at the variety of material and behaviors that one engages in with respect to online material, this concept needs to be explored further to delineate the nature of the relationship.

9.3 Assessment and Treatment Implications

While the results of the study are limited in their generalizability, there are several findings that emerge that may be useful in the treatment of individuals presenting in the community with problematic Internet behaviors or with individuals who are convicted of a crime and report to using sexually explicit material on the Internet. First, the findings indicate that individuals who self-report engaging in sexually aggressive behaviors also self-report having problematic uses of online sexually explicit material. To help urge these individuals to seek treatment and potentially limit the aggressive behaviors, it may be useful to implement psycho-educational programs. Though the present findings did not include a formal offender sample (though a coercive sample was involved), it is clear that both risk and pre-treatment assessments of persons with sexual misbehavior concerns should involve a thorough assessment of the intensity and nature of online activity. The relationship of such online activity to sexual behavior would also warrant attention.

Another finding that emerged was that the volume of materials used mattered more than any specific type of material used. Therefore, it may be useful when assessing individuals convicted of Internet sex-related crimes or individuals presenting for therapy because of a perceived Internet sex addiction, to assess the number of types of sexually explicit material used. The intensity of online activity was also related to fear of negative evaluations. Therefore, it may be useful to assess these three variables, number of types

of sexually explicit material viewed, sexually aggressive behavior, and socially anxious characteristics, to identify if these areas need to be targeted in treatment.

Given the role of the intensity of online sexual content to sexual coercion, individuals who present for online sexual compulsivity may also benefit from strategies targeting compulsive behaviors. Such treatments include motivational interviewing (Miller, Benefield, & Tonigan, 1993) to engage the client in treatment and relapse prevention (Marlatt & Gordon, 1985) to assist in maintenance of new behaviors. In addition, treatments for sexual aggression should also be implemented. When considering these variables further, particularly with respect to individuals convicted of sexual offenses, there is a definite need for further exploration. However, should additional studies indicate these variables are particularly salient in individuals who are convicted of Internet sexual crimes, it may be important to consider these variables when making predictions of risk. That is it say, when considering whether individuals are at increased risk of reoffense, it may be useful to identify their individual patterns of viewing sexually explicit material online. If these individuals endorse viewing a large variety of material, this may be indicative of an increased need for intensive treatment, including a focus on online activity as a risk factor for relapse prevention. However, it should be noted that the current results only point to the need for further research examining this topic, and while the results may provide additional areas to explore in treatment, they do not conclusively provide a strong direction for assessment and treatment purposes.

9.4 Limitations

Though this study represents an important contribution to furthering the study of online sexually explicit material, there are several notable limitations. First, consistent

with the limitation discussed by Jansma, Linz, Mulac and Imirch (1997), several concepts lacked specific operational definitions. For example, participants were asked to self-report whether they viewed violent or degrading material, but the definitions of violent or degrading were largely left to the subjective view of the participant. Though the participant was prompted as to what violent sex may entail (i.e. rape), there was still significant room for subjective interpretation. To help minimize this, participants were asked to provide an example of violent or degrading material. Only 71 of the participants provided a response, and the answers varied widely. For example, some participants provided very vague responses (i.e. "all of it" or "any material that is contrary to my Catholic beliefs) while others provided specific examples (i.e. "anal, sex, bondage, fetishes" or "animal sex"). Based on the wide variety of answers and the overlap with some of the questions presented in the true/false items, it seemed more comprehensive to analyze responses to pre-selected questions (i.e. items leaving the definition of violent or degrading material open to subjective responses) for the results, however, in doing so some element of participant subjectivity remained. This issue of operationalizing terms plagues this body of literature and may have influenced the results, as some people may or may not have endorsed questions based on their subjective interpretation of the question.

Sample selection is another limitation of the current study. Due to the sensitive nature of the material that was asked about in the present study, participants able to read a description prior to signing up for participation that noted the study would be asking about online sexually explicit material. Therefore, it is possible that some individuals who use a lot of sexually explicit online material did not sign up, perhaps due to

embarrassment. Alternatively, individuals who do not use online sexually explicit material may have chosen not to participate in the study, perhaps believing that they did not have any valuable answers to contribute. In addition, the sample was male, college students, so the generalizability of the results is limited.

Another significant limitation is the use of self-report measures to assess sensitive information. Individuals may have underreported their involvement in sexually coercive or aggressive behaviors. Further, individuals may have underreported their use of sexually explicit material. Though the study was designed so that participants could complete the questions in private in an area they felt comfortable in, it is possible some participants did not wish to answer certain questions due to the sensitive nature of some material because of the stigma attached to some of the questions.

It is important to note that the findings in this study do not suggest causality. Because of the design of the study, there is no way to infer causality from the results. While this is a problem often found in the literature, it would be important to research the causal relationship between online viewing of sexually explicit or degrading material and its subsequent effect on behaviors. Studies of this nature would be the most useful when considering any legal or policy implications, because the present results do not suggest whether individuals who look at sexually explicit violent or degrading material are more likely to look at this material because of pre-existing attitudes, behaviors, or personality characteristic, or if looking at these material influences attitudes or behaviors.

Finally, this study did not ask about the use of sexually explicit material depicting underage individuals. Given the previous research (Seto & Eke, 2007) that has suggested a link between deviant sexual arousal and crimes associated with online sexually explicit

material involving children, there is strong support to continuing exploring the relationship between use of such material and behavioral variables. In the present study, questions regarding sexually explicit material with minor subjects were specifically excluded due to ethical concerns. However, recent research (Ray, Kimonis, & Donoghue, 2010) have addressed some of the ethical concerns associated with asking such questions. Therefore, if future research can follow the same procedures used by Ray and colleagues (2010), then asking about the use of sexually explicit material featuring children should be explored further.

9.5 Future Directions

In order to address some of the above limitations, different strategies can be utilized. For example, it would be useful to survey a more diverse group of individuals, including community members, inmates, females, and individuals from lower socioeconomic status, in order to examine if access to a computer and computer skills changes across these populations and subsequently impacts the use of online sexually explicit material. Further, it would be useful to look at the variety of material that individuals accused or convicted of a sexual offense report to using. If those individuals demonstrate a pattern of usage that is substantively different from that of a non-offending population there may be cause for further investigation into the role this material can play in offense behaviors. In addition, it would be useful to identify the pattern of personality, behavioral, and attitudinal characteristics possessed by individuals who offend online. These individuals may be qualitatively different than contact sex offenders and may have different treatment needs. For example, the present research suggests that individuals who use a wider variety of sexually explicit material report more features associated with

social anxiety. Perhaps individuals who commit online crimes have more psychopathology that needs to be addressed in treatment. In addition, the results suggest individuals who view certain types of material online are demonstrating some empathic deficits, suggesting that there may be specific forms of empathy training that may be useful with a population of non-contact, online offenders.

Additionally, this study only examined a subset of the possible variables that may be impacted by exposure to online sexually explicit material. For example, when considering attitudes that may be affected by exposure to such material, it would be interesting to consider attitudes towards different types of behaviors and pornography. As indicated above, there is growing research considering virtual pornography, or images that are of manufactured subjects rather than authentic humans. Attitudes towards this type of pornography would be interesting to explore.

Future studies may consider the inclusion of a social desirability scale. In the present study, it was found that some individuals endorsed engaging in some behaviors that may be considered taboo. However, when considering other behaviors, such as the item used to examine hypothesis five inquiring about the use of online sexually explicit material prior to engaging in sexually coercive behaviors, affirmative response rates were low. While this may be a low base rate behavior and the responses may actually reflect the true rate at which this behavior is occurring, it is also possible that the question was too face valid and perhaps individuals were answering as they thought they should, rather than as is reflective of their behaviors. Therefore, the inclusion of a social desirability scale could help screen for valid responses.

A number of the results of this study hinted at the presence of paraphilia in participants. For example, individuals who endorsed viewing sexually violent and degrading material also had higher scores on the ISST. In addition, individuals who endorsed sexually aggressive behavior endorsed viewing a wider variety of sexually explicit material than other participants. Therefore, future studies examining the use of sexually explicit material may wish to consider including a measure of deviant sexual arousal in order to ascertain whether paraphilia is more prevalent among users of sexually explicit material or users of a specific type of sexually explicit material.

9.6 Summary of Discussion

This study was the first to explore the impact of various types of sexually explicit material on sexually coercive and aggressive behaviors. Though there were some significant results, the most consistent result to emerge was that the quantity and variety of sexually explicit material viewed was the most consistent predictor of deviant sexual behaviors. That is to say, how much, was more important that what was viewed. What this means for future research is that knowing that an individual using online sexually explicit material is important, but knowing the variety of material accessed may be more important. This concept clearly needs to be explored further in the future, but it is important to consider that interest in a wider variety of sexually explicit material may be indicative of interest in a wider variety of sexual behaviors, including sexual behaviors that may cross boundaries into illegal contact.

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Appendix A

<u>INFORMED CONSENT</u>

Informed Consent Form
Exploring Online Sexually Explicit Material
UNL IRB Approval Number 2008129500EP

Purpose of Project

You have been invited to participate in a research study investigating the link between use of the computer to view sexually explicit material and attitudes and behaviors. You must be a male, 19 years of age or older, and you must be able to read questionnaires in English.

Procedures

If you agree to participate, this project will take approximately 1.5 to 2 hours to complete. You will be asked to complete questionnaires regarding your sexual experiences, use of the computer to access sexually explicit material, personality characteristics, and sexual attitudes. All questionnaires are completed online, and you will be expected to follow the directions after you receive a URL from the researcher. All questionnaires will be confidential.

Risks and/or Discomforts

The risks associated with this study are expected to be minimal. However, you may feel distressed or upset because of some of the questions asked. Some questions are sexually explicit (or graphic.) Should you feel uncomfortable, you may skip questions or stop at any time without penalty. Previous participants in similar studies have generally not experienced any adverse consequences. If you feel upset after participating in this study, you may wish to contact the Psychological Consultation Center (402) 472-2351 or Counseling and Psychological Services at the University Health Center (402) 472-4750, for psychological treatment.

Benefits

Although there are no known direct benefits to study participants, this project may provide researchers with a better understanding of how different characteristics and behavior are related, as well as a deeper understanding of the use of the internet for accessing sexually explicit material.

Confidentiality

Your name and any personal information will not be on any of the forms you complete. The responses you provide will be stored on a secure server through the University of Nebraska- Lincoln. No one other than the researchers associated with this study will have access to your responses. The data will be kept for five years after the study is completed then it will be destroyed by the researcher. The knowledge gained from this study may be published in scientific journals or presented at scientific meetings, but it will be reported only as aggregate (or group) data; your individual responses will not be reported.

Compensation

If you are enrolled in a psychology class, you will receive credit in accordance with the policies outlined by your professor. If you are not allowed to receive credit for a class, there is not compensation for participation in this study.

Opportunity to Ask Questions

You may ask questions about this research and have those questions answered before agreeing to participate in the study. If you have questions concerning your rights as a research participant that have not been answered by the investigator or if you wish to report concerns about this study, you may contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965.

Freedom to Withdraw

You are free to decide not to participate in this study or to withdraw at any time without harming your relationship with the researchers, the University of Nebraska-Lincoln and without negative consequences in your class. You decision will not result in any loss of benefits to which you are otherwise entitled.

Consent to Participate

You are voluntarily making a decision whether or not to participate in this research study. Your signature indicated that you have decided to participate in the study after reading the consent form and having opportunities to ask questions about the information presented. You may print a copy of this consent form to keep, or contact the researcher to receive a hard copy of the form.

_____   _____

Signature of Participant   Date

_____   _____

Signature of Researcher   Date

Name and Phone Number of Investigator (s)
Valerie Gonsalves, M.A., Principal Investigator   (402) 473-3126
Vgonsal1@huskers.unl.edu
Mario Scalora, Ph.D., Co-Investigator   (402) 473-3126

APPRENDIX B

<u>SEXUAL EXPERIENCES QUESTIONNAIRE</u>

Please answer the following questions as they pertain to you with 1= never and 5 = often

		Never				Often
1.	Have you ever had sexual intercourse with a woman?	1	2	3	4	5
2.	Do you discuss your sexual experiences with your male friends?	1	2	3	4	5
3.	Do you feel pressured by your male friends to be more sexually active than you are?	1	2	3	4	5
4.	Do you feel that you aren't having sex as often as you "should" be?	1	2	3	4	5
5.	Have you ever felt while on a date that you had consumed enough alcohol or drugs that you weren't really in control of your actions?	1	2	3	4	5
6.	Do you ever act on the spur of the moment without even stopping to think?	1	2	3	4	5
7.	Do you sometimes do whatever makes you feel cheerful – "right now" – even at the cost of some more distant goal?	1	2	3	4	5
8.	Do you sometimes feel that society's "rules of conduct" are more for show than for any real purpose?	1	2	3	4	5
9.	Have you ever felt inadequate because you felt a woman was comparing the way you kiss, or your "performance," with other men?	1	2	3	4	5
10.	Have you ever felt that women sometimes like to act and talk like they were your mother?	1	2	3	4	5
11.	Do you sometimes feel subtly "put down" by women – criticized or ridiculed in a way that makes it hard to defend yourself or respond?	1	2	3	4	5
12.	Have you ever felt the urge to assert yourself with a woman because she was getting a little too "pushy," a little to domineering?	1	2	3	4	5
13.	Have you ever felt that women sometimes try to make you feel "small," like a little boy?	1	2	3	4	5

14. Have you ever felt that, despite their claims to the contrary, women secretly feel superior to men? 1 2 3 4 5

15. Do you feel that women deliberately active seductively toward you – tease you:

   (a) Even when they aren't really interested in you sexually? 1 2 3 4 5

   (b) As a way of trying to show their power over you? 1 2 3 4 5

16. Have you ever felt that a woman was taking advantage of you by implying in subtle ways that she would have sex with you in order to get you to pay for various things (drinks, entertainment, etc.), but then later refused? 1 2 3 4 5

17. Have you ever been deceived by a woman? 1 2 3 4 5

18. Have you ever been betrayed by a woman? 1 2 3 4 5

19. Have you ever been manipulated by a woman? 1 2 3 4 5

20. Have you ever had sexual intercourse with a woman when she didn't want to because you threatened to end your relationship with her otherwise? 1 2 3 4 5

21. Have you ever had sexual intercourse with a woman when she didn't want to because she felt pressured by your continual arguments? 1 2 3 4 5

22. Have you ever obtained sexual intercourse with a woman by making her think that you cared for her more than you really did? 1 2 3 4 5

23. Have you ever obtained sexual intercourse with a woman by deliberately getting her too drunk to resist? 1 2 3 4 5

24. Have you ever persisted in having sexual intercourse with a woman, without using force, even though she verbally tried to stop you? 1 2 3 4 5

If yes, please rate yourself on the following feelings which you may have experienced at the time:

   Anger 1 2 3 4 5

   Need to assert yourself 1 2 3 4 5

   Sexual frustration 1 2 3 4 5

25. Have you ever been in a situation where you used or threatened to use physical force (twisting her arm, holding her down) to make a women engage in kissing or petting when she didn't want to?　　1　2　3　4　5
If yes, please rate yourself on the following feelings which you may have experienced at the time:

    Anger　　1　2　3　4　5

    Need to assert yourself　　1　2　3　4　5

    Sexual frustration　　1　2　3　4　5

26. Have you ever been in a situation where you *tried, but for various reasons did not succeed,* in having sexual intercourse with a woman by *using or threatening to use* physical force (twisting her arm, holding her down, etc.) if she did cooperate?　　1　2　3　4　5
If yes, please rate yourself on the following feelings which you may have experienced at the time:

    Anger　　1　2　3　4　5

    Need to assert yourself　　1　2　3　4　5

    Sexual frustration　　1　2　3　4　5

27. Have you ever had sexual intercourse with a woman when she didn't want to because you *used or threatened to use* physical force (twisting her arm, holding her down, etc.) if she didn't cooperate?　　1　2　3　4　5
If yes, please rate yourself on the following feelings which you may have experienced at the time:

    Anger　　1　2　3　4　5

    Need to assert yourself　　1　2　3　4　5

    Sexual frustration　　1　2　3　4　5

28. Have you ever had oral sex with a woman when she didn't want to because you *used or threatened to use* physical force (Twisting her arm, holding her down, etc.) if she didn't cooperate?　　1　2　3　4　5
If yes, please rate yourself on the following feelings which you may have experienced at the time:

    Anger　　1　2　3　4　5

    Need to assert yourself　　1　2　3　4　5

	1	2	3	4	5
Sexual frustration	1	2	3	4	5

29. Have you ever felt the urge to physically force a woman to have sexual intercourse with you even though you did not act on the urge?   1   2   3   4   5
    If yes, please rate yourself on the following feelings which you may have experienced at the time:

	1	2	3	4	5
Anger	1	2	3	4	5
Need to assert yourself	1	2	3	4	5
Sexual frustration	1	2	3	4	5

Appendix C

Psychopathy Personality Inventory – Revised

PPI-R

This test measures different personality characteristics – that is, the ways in which people' personality styles make them different from each other. Read each statement carefully and decide *how false or true* it is as a description of you. Then, mark the best choice that corresponds to your answer. Use the answer choices provide below:

F = False   MF = Mostly False   MT = Mostly True   T = True

Even if you feel that a statement is neither false nor true about you, or if you are not sure which answer to choose, select the answer that is the *closest* to describing you. Try to be as honest as you can.

	False	Mostly False	Mostly True	True
1. If I really want to, I can persuade most people of almost anything.	1	2	3	4
2. When I meet people, I can often make them interested in me with just one smile.	1	2	3	4
3. Dangerous activities like skydiving scare me more than they do most people.	1	2	3	4
4. I've always seen myself to be something of a rebel.	1	2	3	4
5. I hate having to tell people bad news.	1	2	3	4
6. Sometimes I wake up feeling nervous without knowing why.	1	2	3	4
7. I like to act first and think later.	1	2	3	4
8. I sometimes forget my name.	1	2	3	4
9. At times, I worry that I have hurt the feelings of others.	1	2	3	4
10. I am easily flustered in pressured situation.	1	2	3	4
11. I tell many "white lies."	1	2	3	4
12. I would find the job of movie stunt person exciting.	1	2	3	4
13. When my life gets boring, I like to take chances.	1	2	3	4
14. I've never really cared much about society's "values of right and wrong."	1	2	3	4
15. I might like to hang out with people who "drift" from city to city, with no permanent home.	1	2	3	4
16. If I'd had fewer bad breaks in life, I'd be more successful.	1	2	3	4
17. It would bother me to cheat on a test even if no one was hurt by it.	1	2	3	4
18. A lot of people have tried to "stab me in the back."	1	2	3	4
19. People's reactions to the things I do often are not what I would expect.	1	2	3	4
20. On big holidays, I never eat more than I should.	1	2	3	4
21. I find it hard to make small talk with people I don't know well.	1	2	3	4

22. I'm not good at getting people to do favors for me.	1	2	3	4
23. I get mad if I don't receive special favors I deserve.	1	2	3	4
24. I am hardly ever the center of attention.	1	2	3	4
25. It might be exciting to be on a plane that was about to crash but somehow landed safely.	1	2	3	4
26. I pride myself on being offbeat and different from others.	1	2	3	4
27. A lot of times, I worry when a friend is having personal problems.	1	2	3	4
28. I tend to get crabby and irritable when I have too many things to do.	1	2	3	4
29. A lot of times, I repeat the same bad decision.	1	2	3	4
30. I think that it should be against the law to badly injure someone on purpose.	1	2	3	4
31. I get mad when I hear about the injustices in the world.	1	2	3	4
32. I don't let everyday hassles get on my nerves.	1	2	3	4
33. I could be a good "con artist."	1	2	3	4
34. I have a talent for getting people to talk to me.	1	2	3	4
35. I like (or would like) to play sports with a lot of physical contact.	1	2	3	4
36. I might like to travel around the country with some motorcyclists and cause trouble.	1	2	3	4
37. I have never wished harm on someone else.	1	2	3	4
38. People usually give me the credit that I have coming to me.	1	2	3	4
39. If I want to, I can get people to do what I want without them ever knowing.	1	2	3	4
40. When I'm with people who do something wrong, I usually get the blame.	1	2	3	4
41. I try to be the best at everything I do.	1	2	3	4
42. I have no bad habits.	1	2	3	4
43. In conversations, I'm the one who does most of the talking.	1	2	3	4
44. I try to be the best at everything I do.	1	2	3	4
45. To be honest, I believe that I am more important than most people.	1	2	3	4
46. I feel sure of myself when I'm around other people.	1	2	3	4
47. Parachute jumping would really scare me.	1	2	3	4
48. I'd like to spend my life writing poetry in a commune.	1	2	3	4
49. I look out for myself before I look out for anyone else.	1	2	3	4
50. I am high-strung.	1	2	3	4

51. When people lend me something, I try to get it back to them quickly.   1   2   3   4

52. Whenever I hear an airplane flying above me, I look at the ground.   1   2   3   4

53. I often feel guilty about small things.   1   2   3   4

54. When I'm in a frightening situation, I can "turn off" my fear almost at will.   1   2   3   4

55. I'll break a promise if it's hard to keep.   1   2   3   4

56. I like to stand out in a crowd.   1   2   3   4

57. It would be fun to fly a small airplane by myself.   1   2   3   4

58. I like to dress differently from other people.   1   2   3   4

59. Every once in a while, I nod my head when people speak to me even though I am not paying attention to them.   1   2   3   4

60. People "rake me over the coals" for no good reason.   1   2   3   4

61. In school or at work, I try to "stretch" the rules just to see what I can get away with.   1   2   3   4

62. I've often been betrayed by people I trusted.   1   2   3   4

63. The opposite sex finds me sexy and appealing.   1   2   3   4

64. I have never pretended to know something I didn't know.   1   2   3   4

65. I have a hard time standing up for my rights.   1   2   3   4

66. When a task gets to hard, I'll drop it and move on to something else.   1   2   3   4

67. I enjoy seeing someone I don't like get into trouble.   1   2   3   4

68. I get embarrassed more easily than most people.   1   2   3   4

69. High places make me nervous.   1   2   3   4

70. I get restless when my life gets too predictable.   1   2   3   4

71. It would break my heart to see a poor or homeless person walking the streets at night.   1   2   3   4

72. Some people say that I am a "worry wart."   1   2   3   4

73. I like having my vacations planned out.   1   2   3   4

74. I smile at a funny joke at least once in a while.   1   2   3   4

75. It bothers me a lot when I see someone crying.   1   2   3   4

76. I get stressed out when I'm "juggling" too many tasks.   1   2   3   4

77. I like to (or would like to) wear expensive and showy clothing.   1   2   3   4

78. It's easy for me to go up to a stranger and introduce myself.   1   2   3   4

79. I would not like to be a race-car driver.   1   2   3   4

80. I don't care about following the "rules"; I make my own rules as I go along .   1   2   3   4

81. I never give an opinion unless I've thought it over

carefully.	1	2	3	4
82. Few people in my life have taken advantage of me.	1	2	3	4
83. I don't take advantage of people even when it would be good for me.	1	2	3	4
84. I've been the victim of a lot of bad luck.	1	2	3	4
85. When people are mad at me, I usually win them over with my charm.	1	2	3	4
86. I sometimes put off unpleasant tasks.	1	2	3	4
87. I'm hardly ever the "life of the party."	1	2	3	4
88. I am careful when I do work that involves detail.	1	2	3	4
89. I've thought a lot about my long-term career goals.	1	2	3	4
90. Some people have gone out of their way to make my life difficult.	1	2	3	4
91. I would make a good actor.	1	2	3	4
92. I sometimes lie just to see if I can get someone to believe.	1	2	3	4
93. I agree with the motto, "If you are bored with life, risk it."	1	2	3	4
94. If I had grown up during the 1960s, I would have been a "hippie."	1	2	3	4
95. I can honestly say that I've never met anyone I disliked.	1	2	3	4
96. I function well under stress.	1	2	3	4
97. I feel bad about myself after I tell a lie.	1	2	3	4
98. I get deeply attached to people I like.	1	2	3	4
99. People who know me well know they can depend and rely on me.	1	2	3	4
100. I feel that life has treated me fairly.	1	2	3	4
101. If I do something that gets me in trouble, I don't do it again.	1	2	3	4
102. I frequently have disturbing thoughts that become so powerful that I think I can hear claps of thunder or crashed of cymbals inside my head.	1	2	3	4
103. I have to admit that I am a bit of a materialist.	1	2	3	4
104. I like my life to be unpredictable and surprising.	1	2	3	4
105. I like to poke fun at establish traditions.	1	2	3	4
106. I occasionally feel like giving up on difficult tasks.	1	2	3	4
107. When I'm stress, I often see big, red, rectangular shapes moving front of my eyes.	1	2	3	4
108. I push myself as hard as I can when I'm working.	1	2	3	4
109. I get very upset when I see photographs of starving people.	1	2	3	4
110. Ending a friendship is (or would be) very painful for me.	1	2	3	4

111. I haven't thought much about what I want to do with my life.	1	2	3	4
112. I'm sure some people would be pleased to see me fail in life.	1	2	3	4
113. I hardly ever end up being the leader of a group.	1	2	3	4
114. I often lose patience with people when I have to keep explaining things.	1	2	3	4
115. I might like flying across the ocean in a hot-air balloon.	1	2	3	4
116. Many people see my political beliefs as "radical."	1	2	3	4
117. I occasionally feel annoyed at people.	1	2	3	4
118. I don't get nervous under pressure.	1	2	3	4
119. I worry about things even when there's no reason to.	1	2	3	4
120. I do favors for people even when I know I won't see them again.	1	2	3	4
121. When I am doing something important, like taking a test or doing my taxes, I check it over first.	1	2	3	4
122. People I thought were my "friends" have gotten me into trouble.	1	2	3	4
123. I often put off doing fun things so I can finish my work.	1	2	3	4
124. When an important person is talking to me, I usually try to pay attention.	1	2	3	4
125. How much I like someone really depends on how much that person does for me.	1	2	3	4
126. Sometime I do dangerous things on a dare.	1	2	3	4
127. Keeping the same job for most of my life would be dull.	1	2	3	4
128. I occasionally have bad thoughts about people who hurt my feelings.	1	2	3	4
129. When a friend says hello to me, I generally either wave or say something back.	1	2	3	4
130. I think long and hard before I make big decisions.	1	2	3	4
131. When someone is hurt by something I say or do, that's their problem.	1	2	3	4
132. I tell people only the part of truth they want to hear.	1	2	3	4
133. I've learned from my big mistakes in life.	1	2	3	4
134. I get blamed for many things that aren't my fault.	1	2	3	4
135. It bothers me to talk in front of a big group of strangers.	1	2	3	4
136. I quickly get annoyed with people who do not				

give me what I want.	1	2	3	4
137. If I were a firefighter, I would like the thrill of saving someone from the top of a burning building.	1	2	3	4
138. I would like to have a "wild" hairstyle.	1	2	3	4
139. Even when I'm busy, I never have second thought about helping people who ask for favors.	1	2	3	4
140. I can remain calm in situations that would make many other people panic.	1	2	3	4
141. I'm the kind of person who gets "stressed out" pretty easily.	1	2	3	4
142. I cringe when an athlete gets badly injured during a game on TV.	1	2	3	4
143. I usually think about what I'm going to say before I say it.	1	2	3	4
144. Some people have made up stories about me to get me in trouble.	1	2	3	4
145. I watch my finances closely.	1	2	3	4
146. During the day, I see the world in color rather than in black-and-white.	1	2	3	4
147, To be honest, I try not to help people unless there's something in it for me.	1	2	3	4
148. I am a daredevil.	1	2	3	4
149. I would like to hitchhike across the country with no plans.	1	2	3	4
150. I have never exaggerated a story to make it sound more interesting.	1	2	3	4
151. Sometimes I go for several days at a time not knowing if I'm awake or asleep.	1	2	3	4
152. I try to use my best manners when I'm around other people.	1	2	3	4
153. I often place my friends' needs above my own.	1	2	3	4
154. If I can't change the rules, I try to get others to bend them for me.	1	2	3	4

Appendix D

<u>Interpersonal Reactivity Index</u>

Instructions: **Please circle the number that best matches your answer from 0 (Describes me well) to 4 (Does NOT describe me well).**	**Describes me well**				**Does not describe me well**
1. I daydream and fantasize, with some regularity, about things that might happen to me.	0	1	2	3	4
2. I often have tender, concerned feelings for people less fortunate than me.	0	1	2	3	4
3. I sometimes find it difficult to see things from the "other guy's" point of view.	0	1	2	3	4
4. Sometimes I don't feel very sorry for other people when they are having problems.	0	1	2	3	4
5. I really get involved with the feelings of the characters in a novel.	0	1	2	3	4
6. In emergency situations, I feel apprehensive and ill at ease.	0	1	2	3	4
7. I am usually objective when I watch a movie or play, and I don't often get completely caught up in it.	0	1	2	3	4
8. I try to look at everybody's side of a disagreement before I make a decision.	0	1	2	3	4
9. When I see someone being taken advantage of, I feel kind of protective towards them.	0	1	2	3	4
10. I sometimes feel helpless when I am in the middle of a very emotional situation.	0	1	2	3	4
11. I sometimes try to understand my friends better by imagining how things look from their perspective.	0	1	2	3	4
12. Becoming extremely involved in a good book or movie is somewhat rare for me.	0	1	2	3	4
13. When I see someone get hurt, I tend to remain calm.	0	1	2	3	4

14. Other people's misfortunes do not usually disturb me a great deal.	0	1	2	3	4
15. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.	0	1	2	3	4
16. After seeing a play or movie, I have felt as though I were one of the characters.	0	1	2	3	4
17. Being in a tense emotional situation scares me.	0	1	2	3	4
18. When I see someone being treated unfairly, I sometimes don't feel very much pity for them.	0	1	2	3	4
19. I am usually pretty effective in dealing with emergencies.	0	1	2	3	4
20. I am often quite touched by things that I see happen.	0	1	2	3	4
21. I believe that there are two sides to every question and try to look at them both.	0	1	2	3	4
22. I would describe myself as a pretty softhearted person.	0	1	2	3	4
23. When I watch a good movie, I can easily put myself in the place of a leading character.	0	1	2	3	4
24. I tend to lose control during emergencies.	0	1	2	3	4
25. When I am upset at someone, I usually try to "put myself in his shoes" for a while.	0	1	2	3	4
26. When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.	0	1	2	3	4
27. When I see someone who badly needs help in an emergency, I go to pieces.	0	1	2	3	4
28. Before criticizing somebody, I try to imagine how I would feel if I were in their place.	0	1	2	3	4

APPENDIX E

RAPE SCALE

Please read each statement below carefully and circle the number that indicates how you feel about it. This is about what you truly believe, so DO NOT try to answer in a way that you think others will want you to answer.

1 = strongly disagree
2 = disagree
3 = agree
4 = strongly agree

	Strongly Disagree			Strongly Agree
1. Men who commit rape are probably responding to a lot of stress in their lives, and raping helps to reduce that stress.	1	2	3	4
2. Women who get raped probably deserved it.	1	2	3	4
3. Women generally want sex no matter how they can get it.	1	2	3	4
4. Since prostitutes sell their bodies for sexual purposes anyway, it is not as bad if someone forces them into sex.	1	2	3	4
5. If a woman does not resist strongly to sexual advances, she is probably willing to have sex.	1	2	3	4
6. Women often falsely accuse men of rape.	1	2	3	4
7. A lot of women who get raped had "bad reputations" in the first place.	1	2	3	4
8. If women did not sleep around so much, they would be less likely to get raped.	1	2	3	4
9. If a woman gets drunk at a party, it is really her own fault if someone takes advantage of her sexually.	1	2	3	4
10. When women wear tight clothes, short skirts, and no bra or underwear, they are asking for sex.	1	2	3	4
11. A lot of women claim they were raped just because they want attention.	1	2	3	4
12. Victims of rape are usually a little bit to blame for what happened.	1	2	3	4
13. If a man has had sex with a woman before, then he should be able to have sex with her any time he wants.	1	2	3	4

14. Just fantasizing about forcing someone to have sex isn't all that bad since no one is really being hurt.   1   2   3   4

15. Women who go to bars a lot are mainly looking to have sex.   1   2   3   4

16. A lot of times, when women say "no" they are just playing hard to get, and really mean "yes."   1   2   3   4

17. Part of a wife's duty is to satisfy her husband sexually whenever he wants it, whether or not she is in the mood.   1   2   3   4

18. Often a woman reports rape long after the fact because she gets mad at the man she had sex with and is just trying to get back at him.   1   2   3   4

19. As long as a man does not slap or punch a woman in the process, forcing her to have sex is not as bad.   1   2   3   4

20. When a woman gets raped more than once, she is probably doing something to cause it.   1   2   3   4

21. Women who get raped will eventually forget about it and get on with their lives.   1   2   3   4

22. On a date, when a man spends a lot of money on a woman, the woman ought to at least give the man something in return sexually.   1   2   3   4

23. I believe that if a woman lets a man kiss her and touch her sexually, she should be willing to go all the way.   1   2   3   4

24. When women act like they are too good for men, most men probably think about raping the women to put them in their place.   1   2   3   4

25. I believe that society and the courts are too tough on rapists.   1   2   3   4

26. Most women are sluts and get what they deserve.   1   2   3   4

27. Before the police investigate a woman's claim of rape, it is a good idea to find out what she was wearing, if she had been drinking, and what kind of person she is.   1   2   3   4

28. Generally, rape is not planned – a lot of times it just happens.   1   2   3   4

29. If a person tells himself that he will never rape again, then   1   2   3   4

he probably won't.

30. A lot of men who rape do so because they are deprived of sex.	1	2	3	4
31. The reason a lot of women say "no" to sex is because they don't want to seem loose.	1	2	3	4
32. If a woman goes to the home of a man on the first date, she probably wants to have sex with him.	1	2	3	4
33. Many women have a secret desire to be forced into having sex.	1	2	3	4
34. Most of the men who rape have stronger sexual urges than other men.	1	2	3	4
35. I believe that any woman can prevent herself from being raped if she really wants to.	1	2	3	4
36. Most of the time, the only reason a man commits rape is because he was sexually assaulted as a child.	1	2	3	4

Appendix F

HOSTILITY TOWARD WOMEN

Hostility Toward Women

		Strongly Disagree						Strongly Agree
1.	I feel that many times women flirt with men just to tease them or to hurt them.	1	2	3	4	5	6	7
2.	I believe that most women tell the truth.	1	2	3	4	5	6	7
3.	I usually find myself agreeing with (other) women.	1	2	3	4	5	6	7
4.	I think that most women lie just to get ahead.	1	2	3	4	5	6	7
5.	Generally, it is safer not to trust women.	1	2	3	4	5	6	7
6.	When it really comes down to it, a lot of women a deceitful.	1	2	3	4	5	6	7
7.	I am easily angered by women.	1	2	3	4	5	6	7
8.	I am sure I get a raw deal from the women in my life.	1	2	3	4	5	6	7
9.	Sometimes women bother me by just being around.	1	2	3	4	5	6	7
10.	Women are responsible for most of my troubles.	1	2	3	4	5	6	7

Appendix G

<u>ACCEPTANCE OF INTERPERSONAL VIOLENCE</u>

Acceptance of Interpersonal Violence

Please rate the following items. A score of 1 indicates "strongly agree" and a score of 7 indicates "strongly disagree"

1. People today should not use "an eye for an eye and a tooth for a tooth" as a rule for living.

   1 2 3 4 5 6 7

2. Being roughed up is sexually stimulating to many woman.

   1 2 3 4 5 6 7

3. Many times a woman will pretend she doesn't want to have intercourse because she doesn't want to seem loose, but she's really hoping the man will force her.

   1 2 3 4 5 6 7

4. A wife should move out of the house if her husband hits her.

   1 2 3 4 5 6 7

5. Sometimes the only way a man can get a cold woman turned on is to use force.

   1 2 3 4 5 6 7

6. A man is never justified in hitting his wife.

   1 2 3 4 5 6 7

Appendix H

<u>Internet Sex Screening Test</u>

Please mark True or False to each question as it pertains to you.

1. Internet sex has sometimes interfered with certain aspects of my life.		T	F
2. I have made promises to myself to stop using the Internet for sexual purposes.		T	F
3. I sometimes use cyber sex as a reward for accomplishing something (e.g., finishing a project, stressful day, etc.)		T	F
4. When I am unable to access sexual information online, I feel anxious, angry, or disappointed.		T	F
5. I have punished myself when I use the Internet for sexual purposes (e.g., time-out from computer, cancel Internet subscriptions, etc.)		T	F
6. I believe I am an Internet sex addict.		T	F
7. I have participated in sexually related chats.		T	F
8. I have a sexualized username or nickname that I use on the Internet.		T	F
9. I have increased the risks I take online (e.g., give out name and phone number, meet people offline, etc.)		T	F
10. I have met face to face with someone I met online for romantic purposes.		T	F
11. I use sexual humor and innuendo with others while online.		T	F
12. I have searched for sexual material through an Internet search tool.		T	F
13. I have masturbated while on the Internet.		T	F
14. I have tried to hide what is on my computer or monitor so others cannot see it.		T	F
15. I have stayed up after midnight to access sexual material online.		T	F
16. I have joined sexual sites to gain access to online sexual material.		T	F
17. I have purchased sexual products online.		T	F
18. I have spent more money for online sexual material than I planned.		T	F
19. I have some sexual sites bookmarked.		T	F

20. I spend more than 5 hours per week using my computer for sexual pursuits.	T	F
21. I have searched for sexual material through an Internet search tool.	T	F
22. I have accessed sexual sites from other computers besides my home.	T	F
23. I use the Internet to experiment with different aspects of sexuality (e.g., bondage, homosexuality, anal sex, etc.)	T	F
24. I have my own website which contains some sexual material.	T	F
25. I believe I am an Internet sex addict.	T	F

Appendix I

<u>USE OF SEXUALLY EXPLICIT MATERIAL SURVEY</u>

1. How old are you? _____

2. Please circle the answer that most accurately describes you:

Caucasian   African-American   Asian/Pacific-Islander

Latino/a   Native American   Other

3. I am currently: single   dating   in a committed relationship
                        married   separated   divorced   widowed

4. I have had sexual intercourse with a man or a woman?(circle one)
                        Yes   No

5. Do you own/ have access to a computer? (circle one)   Yes   No

6. How would you rate your ability to use a computer?
        1   2   3   4   5
      poor   average   superior

7. In an average day, how much time do you spend on the computer for leisure (not
related to school or work) activities? (please circle ONE answer)

        0 hours   1-3 hours   3-6 hours   6-9 hours   10 or more hours

8. Have you ever used a computer to look at sexually explicit material (i.e. pornography,
nudity)?

            Yes   No
        If you answered no to this question, please go to question: 39

9. How much time do you spending looking at sexually explicit material on the computer
in an average day?

        0 hours   1-3 hours   3-6 hours   6-9 hours   10 or more hours

10. What type of sites do you visit to look at sexually explicit material? (please check all
that apply)
        ☐ Free
        ☐ Charge a membership fee
        ☐ Charge me per visit

11. What type of sexually explicit material to you prefer to view online? (please check all
that apply)

☐ only females
☐ only males
☐ female to male contact
☐ female to female contact
☐ male to male contact

12. Which of the following age groups do you enjoying viewing engaging in sexually explicit acts? (please check all that apply)

☐ Barely legal (18)
☐ College ages (19-22)
☐ Young adults (22-30)
☐ Adults (31-60)
☐ Mature Adults (60 +)

13. With whom do you generally view sexually explicit websites? (please check all that apply)
☐ alone
☐ with friends
☐ with my significant other

14. On what computer(s) do you access sexually explicit material on: (please check all that apply)
☐ my private computer
☐ my roommate/friends computer
☐ my family's computer
☐ university computers
☐ public computers

15. How old were you when you first began looking at sexually explicit material online?

Under age 10   10-12   12-14   14-16   18-20   Over 20

16. The type of sexually explicit material I typically access includes: (please check all that apply)

☐ pictures depicted nudity
☐ pictures of sexual acts
☐ stories describing sexual encounters in great detail
☐ films of penile-vaginal penetration
☐ films of oral sex
☐ films of digital (finger)-vaginal penetration
☐ films of penile-anal penetration
☐ films involving two males and one female engaging in sexual acts

☐ films involving two females and one male engaging in sexual acts
☐ films involving group sex (orgy)
☐ films involving multiple males and one female (i.e. "gang-bang")
☐ films depicting fantasy portrayal (i.e. nurse, cheerleader, etc.)
☐ films depicting bondage
☐ films showing a man ejaculating on the face or body of his partner
☐ films depicting a woman acting in a dominatrix role
☐ films depicting sexual fetishes (i.e. fur, feathers, feet)
☐ films showing "soft-core" images (i.e. kissing while clothed, minimal nudity)
☐ films involving a woman in a submissive role
☐ films involving a woman in a degrading role
☐ films that involve violent sex (i.e. rape)

17. Please provide an example of what you consider to be degrading?

1. I masturbate when I view sexually explicit material.	T	F
2. My partner and I watch sexually explicit material *together* while engaging in sexual behaviors.	T	F
3. I watch sexually explicit material to get aroused *before* engaging in sexual behaviors with my partner.	T	F
4. Sometimes, I get so aroused (turned-on) watching sexually explicit material online, I seek a "one-night stand."	T	F
5. I get ideas for different sexual activities based on the content of the material I view online.	T	F
6. I have wanted to pressure a woman/man to engage in sexual activity based on what I have viewed online.	T	F
7. I have watched sexually explicit material online and then forced someone to have sex with me.	T	F
8. My partner has been frightened during sexual contact when I have done something I learned online.	T	F
9. I have forced someone to engage in sexual acts with me after watching sexually explicit material online.	T	F
10. I visit sites that allow me to virtually interact with a sexual partner using a web-cam.	T	F
11. I visit sites that allow me to watch, in real time, others engaging in daily activities.	T	F
12. I enjoy viewing live-streaming of people engaging in sexually explicit behaviors online.	T	F
13. I have met people online solely for the purposes of meeting offline and engaging in sexual behavior.	T	F
14. I have broadcast images of myself engaging in sexual behaviors to people I have met online.	T	F
15. I like to visit chat rooms for the purpose of engaging in cybersex.	T	F
16. I would be embarrassed if my loved ones found out I view sexually	T	F

explicit material online.

17. The time I spend accessing sexually explicit material online has increased   T   F
since I first looked at this material.

18. I have become more uninhibited since I began looking at sexually explicit   T   F
material online.

19. I prefer looking at sexually explicit material on the Internet because the   T   F
people do not seem as real to me.

20. I prefer looking at sexually explicit material on the Internet because I feel   T   F
distant from the people in the material.

21. I prefer looking at sexually explicit material on the Internet because it is   T   F
anonymous and my identity is protected.

22. I think it is wrong that I look at sexually explicit material online.   T   F

23. Watching sexually explicit material online is not as bad as viewing it   T   F
offline.

24. I look at sexually explicit material offline (i.e. magazines).   T   F
 **If the answer is false please move on to the next questionnaire.

25. I look at sexually explicit material online more frequently than I do   T   F
offline (i.e. magazines, movies).

26. I look at sexually explicit material offline more frequently than I do   T   F
online.

44. How old were you when you first began looking at traditional sexually explicit
material (i.e. magazines)?

Under age 10   10-12   12-14   14-16   18-20   Over
20

45. How much time do you spending looking at traditional forms of sexually explicit
material?

      0 hours   1-3 hours   3-6 hours   6-9 hours   10 or more hours

46. Have you ever been charged or convicted of a sexual offense (misdemeanor or
felony)?

      Yes   No

Table 1

Demographic Data by Group

	Not Sexually Coercive or Sexually Aggressive (*n* = 119)	Sexually Coercive (*n* = 61)	Sexually Aggressive (*n* = 45)
Age (years)	19.85 (1.67)	20.42 (2.98)	20.10 (2.27)
Ability to Use a Computer (rated between 1-5)	4.17 (.75)	4.10 (.83)	4.18 (.68)
Daily Hours Spent on the Computer for Leisure	2.44 (.70)	2.36 (.68)	2.60 (.92)
Daily Hours Spent Looking at Sexually Explicit Material	.93 (.70)	.90 (.66)	.98 (.76)
Ethnicity (%)			
Caucasian	88.9	90.2	91.1
African-American	3.4	1.6	2.2
Latino/a	6.8	0	0
Native American	0	3.3	4.4
Asian/Pacific Islander	0	3.3	2.2
Other	.8	1.6	0
Relationship Status (%)			
Single	58.8	54.1	53.5
Dating	11.8	18.0	16.3
In a committed relationship	26.9	24.6	23.3
Married	.8	0	2.3
Separated	0	1.6	4.7

Table 2

Self-Reported Usage by group

	Not Sexually Coercive or Aggressive	Sexually Coercive	Sexually Aggressive
Endorse viewing Sexually Explicit Material Online (%)	90.7	98.3	95.6
Types of Sites (%)			
Free	81.4	96.7	93.0
Charge a Fee	2.5	1.6	2.3
Actors in the Material (%)			
Female/Male	63.6	77.0	77.8
Female/Female	39.0	57.4	66.7
Male/Male	1.7	4.9	0
Age of Actors in the Material			
18	36.4	49.2	60.0
19-22	75.4	88.5	82.2
22-30	60.2	65.6	75.6
31-60	11.9	14.8	24.4
60 and over	.8	3.3	2.2
Watching Audience			
Alone	82.2	95.1	86.7
Friends	11.0	8.2	20.0
Significant Other	4.2	8.2	6.7
films of penile-vaginal penetration	60.2	72.1	73.3
films of oral sex	42.4	68.9	68.9
films of digital (finger)-vaginal penetration	32.2	41.0	57.8
films of penile-anal penetration	29.7	42.6	60.0
films involving two males and one female	20.3	34.4	35.6
films involving two females and one male	39.8	57.4	66.7

films involving group sex (orgy)	11.0	23.0	26.7
films involving multiple males and one female	10.2	19.7	17.8
films depicting fantasy portrayal	18.6	31.1	35.6
films depicting bondage	9.3	9.8	13.3
films showing a man ejaculating on his partner	11.9	24.6	26.7
films depicting a woman in a dominatrix role	9.3	9.8	11.1
films depicting sexual fetishes	8.5	13.1	6.7
films showing "soft-core" images	11.9	19.7	15.6
films involving a woman in a submissive role	12.7	16.4	17.8
films involving a woman in a degrading role	16.9	11.5	20.0
films that involve forced intercourse	14.4	8.2	17.8

Table 3

Means and standard deviations for attitudinal variables

	Neither		Violent		Degrading		Both	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
RS	63.32	15.26	80.00	24.98	63.73	13.66	62.97	14.13
AIV	33.87	5.41	28.5	9.81	31.64	9.25	32.27	7.15
HTW	32.93	8.35	33.50	4.20	32.09	8.61	33.70	8.85

Note: RS = Rape Scale; AIV = Acceptance of Interpersonal Violence, HTW = Hostility Toward Women

Table 4

MANOVA results examining use of sexually explicit material and empathic deficits and psychopathic characteristics

	Neither		Violent		Degrading		Both		F	*p*
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*		
IRI Total	72.80	11.51	66.22	3.14	70.91	16.81	65.24	12.87	3.68	.01*
PPI total	297.83	29.05	331.14	33.77	204.75	32.86	301.96	36.77	1.07	.36
IRI-PT	16.29	4.58	12.50	.71	17.73	4.94	14.99	4.36	2.64	.05
IRI- EC	15.90	3.73	15.00	2.83	15.91	4.61	16.06	4.66	.01	.99
IRI-F[1]	18.19	5.76	14.42	2.24	13.82	4.98	13.81	5.97	7.72	.00*
IRI-PD	22.79	4.55	24.00	1.41	23.45	4.70	21.18	3.83	1.32	.27
PPI-ME	43.84	7.68	44.00	8.49	45.55	7.20	45.00	7.64		
PPI-RN	33.66	7.41	44.00	9.90	37.27	8.17	34.57	8.73		
PPI-BE	30.59	6.68	34.14	.20	31.75	8.54	33.26	7.60		
PPI-CN	37.18	7.29	45.00	5.66	37.27	5.80	37.75	8.01		
PPI-SoI	47.04	7.31	50.00	5.66	45.73	5.92	45.56	8.60		
PPI-FL	37.09	7.99	45.50	9.19	39.27	8.64	37.63	9.29		
PPI-SI	34.88	5.88	35.50	10.61	35.91	5.94	34.58	5.93		
PPI-CH	33.41	5.58	33.00	4.24	32.00	5.93	34.13	6.19		
PPI-SCI	144.91	21.86	168.07	10.96	151.84	22.68	150.91	26.03		
PPI-FD	119.15	15.71	128.00	15.10	120.91	13.78	118.95	16.12		

*p < .05, **p < .001
Note: [1] denotes significant differences between the Neither and the Both group; IRI total = total score on the IRI; PPI total = total score on the PPI-R; IRI-PT = score on the perspective-taking scale of the IRI; IRI-EC = score on the empathic concern scale of the IRI; IRI-F = score on fantasy scale of the IRI; IRI-PD = score on the personal distress scale of the IRI; PPI-ME = score on the Machiavellian Egocentricy scale of the PPI-R; PPI-RN = score on the Rebellious Nonconformity scale of the PPI-R; PPI- BE = score on the Blame Externalization scale of the

PPI-R; PPI-CN = score on the Carefree Nonplanfulness scale of the PPI-R; PPI-SoI = score on the Social Influence scale of the PPI-R; PPI-FL = score on the Fearlessness scale of the PPI-R; PPI-SI = score on the Stress Immunity scale of the PPI-R; PPI-CH = score on the Coldheartedness scale of the PPI-R; PPI-SCI = score on the Self-Centered Impulsivity factor of the PPI-R; PPI-FD = score on the Fearless Dominance factor of the PPI-R.

Table 5

Univariate and Multivariate results examining sexually coercive behavior and sexual compulsivity

	Sexually Aggressive		Sexually Coercive		Not Sexually Aggressive or Coercive		F	*p*
	M	*SD*	*M*	*SD*	*M*	*SD*		
ISST total[1]	33.73	4.04	31.12	4.10	30.63	3.59	10.59	.000*
ISST- SC[2]	7.82	1.76	7.10	1.47	7.12	1.26	4.34	.014*
Multivariate Results								
ISST- SC[3]	7.82	1.76	7.05	1.43	7.09	1.22	5.01	.01*
ISST- SBS[4]	6.07	1.23	5.62	1.04	5.58	.88	3.97	.02*
ISST- SBI[5]	7.41	1.02	6.98	1.37	6.63	1.35	5.98	.00**
ISST- SS	3.41	.73	3.57	.63	3.19	.52	2.20	.11
ISST- ISB	2.36	.61	2.15	.40	2.20	.53	2.36	.10

 *p < .05, **p < .001

Note: [1] denotes significant differences on Tukey post-hoc tests between all three groups; [2] denotes significant differences on Tukey post-hoc tests between all three groups; [3] denotes significant differences on Tukey post-hoc tests between all three groups; [4] denotes significant differences on Tukey post-hoc tests between the Sexually Aggressive group and the Not Sexually Aggressive or Coercive group; [5]denotes significant differences on Tukey post-hoc tests between the sexually Aggressive group and the Not Sexually Aggressive or Coercive group; ISST total = total score on ISST; ISST-SC = score on the Online Sexual Compulsivity scale of the ISST; ISST-SBS = score on the Online Sexual Behavior-Social scale of the ISST; ISST-SBI = score on the Online Sexual Behavior-Isolated scale of the ISST; ISST-SS = score on the Online Sexual Spending scale of the ISST; ISST-ISB = score on the Online Sexual Behavior scale of the ISST.

Table 6

ANOVA results examining use of sexually explicit material and sexual compulsivity

	Neither		Violent		Degrading		Both		F	*p*
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*		
ISST total[1]	30.93	3.97	33.25	6.24	33.09	3.21	33.45	3.19	4.94	.00*
Multivariate Results										
ISST-SC[2]	7.11	1.41	9.00	1.83	7.82	1.24	7.55	1.35	3.81	.01*
ISST-SBS	5.68	1.06	5.75	.96	5.64	.81	6.12	1.02	1.67	.18
ISST-SBI[3]	6.73	1.36	6.25	2.06	7.36	1.21	7.54	.83	4.46	.01*
ISST-SS	3.24	.21	3.25	.50	3.36	.67	3.39	.70	.65	.59
ISST-ISB	2.20	.49	2.50	1.00	2.36	.50	2.24	.56	.83	.48

*p < .05, **p < .001

NOTE: [1] denotes significant differences on Tukey post-hoc tests between the Neither group and the Both group; [2] denotes significant differences on Tukey post-hoc tests between the Neither group and the Violent group; [3] denotes significant differences on Tukey post-hoc tests between the Neither group and the Both group; ISST total = total score on ISST; ISST-SC = score on the Online Sexual Compulsivity scale of the ISST; ISST-SBS = score on the Online Sexual Behavior-Social scale of the ISST; ISST-SBI = score on the Online Sexual Behavior-Isolated scale of the ISST; ISST-SS = score on the Online Sexual Spending scale of the ISST; ISST-ISB = score on the Online Sexual Behavior scale of the ISST.

Table 7

Factor Loading for Varimax Orthogonal Three-factor Solution Type of Material Items

Item	Factor Loading		
	1	2	3
1. films of penile-vaginal penetration	-.237	.050	**.684**
2. films of oral sex	-.092	.122	**.769**
3. films of finger-vaginal penetration	.272	.139	**.608**
4. films involving penile-anal penetration	.253	.095	**.750**
5. films involving two males and one female	.495	.111	**.516**
6. films involving two females and one male	.127	.191	**.778**
7. films involving group sex	.198	**.763**	.282
8. films involving multiple males and one female	.510	**.634**	.172
9. films depicting fantasy portrayal	.095	**.781**	.226
10. films depicting bondage	**.766**	.495	-.026
11. films showing a man ejaculating on his partner	.269	**.760**	.220
12. films depicting a woman in a dominatrix role	**.741**	.468	.017
13. films depicting sexual fetishes	**.691**	.537	-.034
14. films showing "soft-core" images	.324	**.650**	-.007
15. films involving a woman in a submissive role	**.600**	**.615**	.079
16. films involving a woman in a degrading role	**.849**	.145	.207
17. films that involve forced intercourse	**.846**	.219	.087

Table 8

Factor Loading for Varimax Orthogonal Three-factor Solution For True/False Items

Item	Factor Loading						
	1	2	3	4	5	6	7
I masturbate when I view sexually explicit material.	-.081	.052	.308	**.644**	-.050	.208	.040
My partner and I watch sexually explicit material *together* while engaging in sexual behaviors.	-.024	-.146	.042	.023	.002	.175	**.789**
I watch sexually explicit material to get aroused *before* engaging in sexual behaviors with my partner.	.237	**.357**	.117	-.044	-.573	.299	**.310**
Sometimes, I get so aroused (turned-on) watching sexually explicit material online, I seek a "one-night stand."	.094	.033	-.116	.045	.089	**.682**	.037
I get ideas for different sexual activities based on the content of the material I view online.	-.069	.040	.163	.284	-.088	**.697**	.099
I have wanted to pressure a woman/man to engage in sexual activity based on what I have viewed online.	-.032	**.338**	**.390**	-.025	.041	**.368**	-.026
I have watched sexually explicit material online and then forced someone to have sex with me.	**.835**	.306	.074	.035	-.081	-.031	.172
My partner has been frightened during sexual contact when I have done something I learned online.	.174	.176	.196	-.038	**.687**	.049	.188
I visit sites that allow me to virtually interact with a sexual partner using a web-cam.	.090	.378	.106	.048	**.685**	.079	.079
I visit sites that allow me to watch, in real time, others engaging in daily activities.	.139	**.803**	.100	.100	.184	.058	.029
I enjoy viewing live-streaming of people engaging in sexually explicit behaviors online.	.246	**.802**	-.003	.149	.154	.031	-.066
I have met people online solely for the purposes of meeting offline and engaging in sexual behavior.	.294	.225	-.170	.219	.264	-.073	**.558**

I have broadcast images of myself engaging in sexual behaviors to people I have met online.	**.914**	.044	.048	-.024	.166	.024	-.017
I like to visit chat rooms for the purpose of engaging in cybersex.	**.502**	.319	-.094	.048	.410	.264	-.200
I would be embarrassed if my loved ones found out I view sexually explicit material online.	.155	-.112	**.529**	.195	.008	.218	-.388
The time I spend accessing sexually explicit material online has increased since I first looked at this material.	.062	-.036	.056	**.784**	.113	.199	.019
I have become more uninhibited since I began looking at sexually explicit material online.	.031	.214	.004	**.734**	-.030	-.065	.036
I prefer looking at sexually explicit material on the Internet because the people do not seem as real to me.	.007	-.011	**.783**	.185	.101	-.059	.000
I prefer looking at sexually explicit material on the Internet because I feel distant from the people in the material.	.021	.137	**.854**	.013	.059	-.029	.050

Table 9.

Correlations between total score of true/false items and measures used in study

	Sum of True/False questions	Sum of types of material questions
1. SSS-total score	.03	.18*
2. SSS-ES	.02	.07
3. SSS-DIS	.02	.08
4. SSS-BS	.08	.03
5. SSS-TAS	-.01	-.02
6. IRI-PT	.01	-.17*
7. IRI-EC	.03	.00
8. IRI-F	-.12	-.32**
9. IRI-PD	-.15*	-.19**
10. IRI-TOT	-.11	-.28**
11. PPI-SCI	.28**	.13*
12. PPI-FD	-.10	.04
13. PPI-Total	.17*	.12
14. PPI-ME	.31**	.18**
15. PPI-BE	.16*	.10
16. PPI-CN	.15	.00
17. PPI- SoI	-.09	.02

18. PPI-FL	.04	.09
19. PPI-SI	-.20**	-.03
20. PPI-CH	.05	-.01
21. ISST-Total	.56*	.41**
22. ISST-SC	.44**	.20**
23. ISST-SBS	.28**	.27**
24. ISST-SBI	.41**	.44**
25. ISST-SP	.31**	.11
26. ISST-SB	.30**	.12
27. RS	.28**	.12
28. AIV	-.26**	-.16*
29. HTW	.29**	.18**
30. BFNE	.16*	.07
31. Sexually Aggressive Behavior	.29**	.21**

*p < .05, **p < .001

NOTE: SSS-total = total score on the SSS; SSS-ES = score on the Experience Seeking scale of the SSS; SSS-DIS= score on the Disinhibition scale of the SSS; SSS-BS = score on the Boredom Susceptibility scale of the SSS; SSS-TAS = score on the Thrill and Adventure Seeking scale of the SSS; IRI-PT = score on the perspective-taking scale of the IRI; IRI-EC = score on the empathic concern scale of the IRI; IRI-F = score on fantasy scale of the IRI; IRI-PD = score on the personal distress scale of the IRI; IRI total = total score on the IRI; PPI-SCI = score on the Self-Centered Impulsivity factor of the PPI-R; PPI-FD = score on the Fearless Dominance factor of the PPI-R; PPI total = total score on the PPI-R; PPI-ME = score on the Machiavellian Egocentricy scale of the PPI-R; PPI-RN = score on the Rebellious Nonconformity scale of the PPI-R; PPI- BE = score on the Blame Externalization scale of the PPI-R; PPI-CN = score on the Carefree Nonplanfulness scale of the PPI-R; PPI-SoI = score on the Social Influence scale of the PPI-R; PPI-FL = score on the Fearlessness scale of the PPI-R; PPI-SI = score on the Stress Immunity scale of the PPI-R; PPI-CH = score on the Coldheartedness scale of the PPI-R; ISST total = total score on ISST; ISST-SC = score on the Online Sexual Compulsivity scale of the

ISST; ISST-SBS = score on the Online Sexual Behavior-Social scale of the ISST; ISST-SBI = score on the Online Sexual Behavior-Isolated scale of the ISST; ISST-SS = score on the Online Sexual Spending scale of the ISST; ISST-ISB = score on the Online Sexual Behavior scale of the ISST; RS = Rape Scale; AIV = Acceptance of Interpersonal Violence, HTW = Hostility Toward Women; BFNE = total score on the Brief FNE.