CONNECTIONS TO SEXUAL AND SOCIAL DEVELOPMENT

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Sexting: Connections to Sexual and Social Development

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Abstract

The present study examines the potential risk factors for individuals who engage in sexting behavior. It examines whether individuals who experienced some form of child sexual abuse will be more likely than others to become involved in sexting. Child sexual abuse has been found to have detrimental effects on its victims, and thus may lead individuals who experience such abuse to engage in a more risky lifestyle. It is also believed that sexting will be highly correlated with an earlier onset age for sexual behavior. Since sexting involves sexually explicit behavior, engaging in sexual behavior_earlier seems related and would make an individual more vulnerable to sexting as well. In this study 110 undergraduate subjects participated in an online survey assessing background characteristics and sexting behavior.

Results revealed that participants with a past history of child sexual abuse are more likely to send nude sext messages. Additionally, participants who have both an earlier onset age for sexual touching and more sexual touching partners are more likely to send nude and seminude sext messages. Oral sex results were also significant suggesting that those with an earlier onset age for oral sex are more likely to receive nude and seminude sexts.

Sexting: Connections to Sexual and Social Development

Sexting is defined as the act of sending sexually explicit messages or photographs, primarily between mobile phones. Though relatively new, this risky behavior has gained national attention as a very serious problem in schools throughout the country. The danger involved with sexting is that private material can be exchanged and widely propagated, and the originator has no control over who receives and views the message or photograph. Recent surveys show that many teenagers that are under the age of 18 are engaging in sexting behavior, which has led to a legal gray area in many countries that have strict anti-pornography laws, most prominently the United States. A 2008 survey of 1,280 teenagers and young adults reported that 20% of teens aged 13-19 and 33% of young adults aged 20-26 have sent sexually explicit text messages of themselves to others in an electronic form (National Campaign to Prevent Teen and Unplanned Pregnancy 2008). These messages were described as nude or semi-nude photographs.

This phenomenon is relatively new as the term "sexting" was only coined in 2005. It is evidently a result of the recent advancement in technology that allows for photographs to be sent electronically. The prevalence of texting has sky-rocked throughout the past few years, with the Nielsen Company stating that nationally there are more than 75 billion texts sent a month, with the prominent age group falling in between the 13-17 range. Teens now see sexting as a way of communicating and socializing in a more flirtatious manner without the person-to-person

interaction (Ostrager, 2010). Unfortunately, this form of social interaction is much more explicit and can have a much greater impact on the sender.

It is important to discuss the legal ramifications of sexting, as there are lasting criminal offenses for such precarious behavior. Currently, federal laws mandate that teenagers who are caught sexting will face child pornography charges (Ostrager, 2010). Although harsh, these laws are proposed for making sure children are not abused physically and exploited. The problem is that federal child pornography laws at this time do no exempt minors who take naked pictures of themselves or give them to their peers. The actual statute reads, "Any person who employs, uses, persuades, induces, entices, or coerces any minor to engage in, or who has a minor assist any other person to engage in, any sexually explicit conduct for the purpose of producing any visual or print medium depicting such conduct, shall be punished . . ." (Ostrager, 2010). Thus, these minors could be facing jail time for sexting, and furthermore be mandated to register as a sex offender for up to ten years. Depending upon where the minor lives, will also affect how harsh the punishment for the crime is due to the diverse regulations in every state.

To illustrate some real-life incidences, in Texas a 13 year old boy was found with a nude picture of a fellow classmate_on his phone. Once the picture surfaced, the boy was sent to a juvenile detention center and now faces charges of child pornography. If convicted, he could be ordered to register as a sex offender for the next ten years. Essentially, there are three severe consequences of applying these laws to teenage sexters. The idea of branding a young minor as a sex offender for life could be devastating to them as adults and could ruin their futures. Furthermore, it is not pragmatic to inundate the sex offender system with young teens when it is more important to keep track of truly dangerous adult sex offenders. Lastly, research has shown that the teenage brain is not completely developed, thus their frontal-lobe where the decision

making processes take place is not anywhere near that of an adult (Ostrager, 2010). Essentially, it seems rather hypocritical to charge minors and adults with the same crime and punishments when their brains and cognitive functions are completely different.

Due to "sexting" being a relatively new phenomenon, there is a dearth of information on the topic. Yet, several studies have been conducted that show the increasing number of young individuals who are engaging in this risky behavior. A recent study compiled in 2009 by the Associated Press and by MTV sampled 1,247 youths aged 14 to 24 years old. They found that fifty percent of the participants have been the victims of some type of digital abuse. Thirty percent of these individuals had either sent or received nude photos on their cell phone or online. Another alarming statistic showed that 61% of those who had sent a naked photo or video of themselves were pressured into doing so by someone else (Associated Press 2009). This idea of sexting is becoming trivialized in the media as well. To illustrate, in a November 2009 AARP article entitled, "Sexting Not Just for Kids", the author gave tips on how to send a "sext" without getting caught. They cavalierly stated to keep your face out of the picture. This positive promotion of sexting in the media can be quite dangerous for young developing minds of teenagers. In a 2010 Motorola Super Bowl Commercial, actress Megan Fox takes a nude picture of herself in a bathtub and sends it out virally, while men stare with wide eyes at the picture (Hoffman, 2011). With the media encouraging and trivializing such risky behavior as sexting, it is no wonder that sexting is becoming more prevalent in our youth today. Thus, one of the most important questions that must be answered in order to help create prevention strategies to deter our youth from sexting is what are the precursors and risk factors?

Past child sexual abuse is one factor that is believed to influence this type of risky behavior. A prolific amount of research has been conducted in this area linking child sexual

abuse to later sexual exploitation and high-risk sexual behavior. To illustrate, in 2010 a literature review was published that explored the incidence of child sexual abuse from cases internationally and found a link between later sexual exploitation with these individuals (Lalor & McElvaney, 2010). This meta-analysis found that survivors of child sexual abuse are more likely to be more sexually promiscuous by having more sexual partners, becoming pregnant as teenagers, and being sexually assaulted as adults. After being sexually abused as a developing child, many of these victims experience depression, anxiety, and low self-esteem which makes these individuals much more vulnerable to later sexual re-victimization. The meta-analysis showed that women who have a history of child sexual abuse are associated with an earlier onset of sexual activity once again making them more vulnerable to high-risk sexual behavior (Lalor et al 2010). The vast amount of evidence on child sexual abuse shows that it may be a possible precursor for individuals who engage in sexting. The act of sexting is a high-risk sexual behavior that may be directly related to the vulnerability associated with a past history of child sexual abuse.

Furthermore, a 2008 study by Niehaus and colleagues illustrated similar findings suggesting childhood sexual abuse increases risks for later sexual promiscuity. Childhood sexual abuse hinders a child from developing normal sexual behavior, and interferes with their cognitive understanding of sexuality. In this study, researchers utilized sexual self-schemas to identify the impact of child sexual abuse on its victims (Niehaus, Jackson, & Davis, 2010). A sexual self-schema is identified in this case as generalized cognitive views about oneself as a sexual person (Anderson & Cyranowski, 1994). The sexual self-schema is important as it drives a person's decisions and behaviors currently and in the future. This self-schema represents a person's past history with sexual relationships, and their thoughts and emotions about these past occurrences.

Thus, if someone has a past history of sexual abuse it can greatly affect their judgments and feelings about there self and others. A multitude of studies have shown this correlation between unrestricted sexual behavior and child sexual abuse. To illustrate, in 1995 Miller, Monsoon, and Norton found that young women that had been sexually abused as children were more likely to have a younger onset age of first consensual sexual intercourse. In 1997, Fergusson, Horwood, and Lynskey discovered that young women with a past history of child sexual abuse had a higher number of consensual sexual partners than young women who were not sexually abused. That same research group also saw a correlation between more teenage pregnancies and child sexual abuse. This risky sexual behavior in adolescents who have experienced child sexual abuse can lead to extra-marital affairs, sexually transmitted diseases, less frequent use of contraception, and sexual intercourse on the first date (Walser and Kern, 1996). In the self-schema study, women were only included, but the results are far-reaching in showing how child sexual abuse can affect the way an individual views themselves as a sexual person later on in life. The study attempted to evaluate how CSA survivors viewed themselves on the Sexual Self Schema Scale with a total of 774 college-aged women. Results indicated that CSA victims saw themselves as more open and immoral. They appeared to have more irresponsible cognitive thoughts about sexuality, which seemed to directly relate to the vulnerability to risky sexual behavior (Niehaus et al., 2010). Essentially, the low self-esteem and vulnerability that victims of child sexual abuse face after their horrific experiences illustrate how CSA may be a precursor for the risky behavior of sexting.

Early sexual initiation has become much more prevalent over the past thirty years. In the United States, the age of sexual onset continues to decline, subsequently prompting experimenters to investigate the risk factors associated with such early sexual activity. An early

onset age of sexual behavior has often been associated with later risky sexual behavior, and thus could be a possible predictor of sexting as well. In a 2001 longitudinal study, adolescents were instructed to complete a survey in middle school and then again in high school on their own sexual and risky behaviors. The collected data showed that adolescent male and females who had reported an early onset of sexual behavior were more likely to have had multiple sex partners, frequent intercourse, intercourse while drunk or high, and females were more likely to face pregnancy. This data elucidates the fact that early sexual activity can make adolescents much more vulnerable to high-risk sexual behavior such as sexting (O'Donnell, 2001).

In another informative publication, researches at the University of Albany in New York sought out to determine whether early sexual activity might prove to lead to anti-social and criminological behavior (Kierkus, 2007). This study is an important tool in understanding sexting because early sexual activity may have a correlation to sexting, a dangerous activity that could be a sign of criminal behavior. In order to conduct this study, data was taken from three different age cohorts in the Youth Development Study. These age groups represented middle school aged children, teenagers entering high school, and adolescents that were currently in high school for about a year. It has long been theorized that peer relationships are a vital causal factor in delinquent behavior, but early behavior in romantic relationships may play an even greater role. Childhood to adolescence is one of the most crucial points of development, thus entering this transitional stage too early could result in poor psychological development. For both boys and girls becoming close to the opposite gender at a young age, and becoming sexually active with them can expose these adolescents to deleterious influences that could lead to behavioral problems in their future (Kierkus, 2007). Becoming sexually active leads to a feeling of adulthood and if this feeling is too premature, the adolescent is much more vulnerable to

delinquency and weakened bonds with parents. Early onset of sexual behavior has a variety of consequences such as teenager parenthood and sexually transmitted diseases (Kierkus, 2007). Thus, it is overtly arguable that assuming the adult role of sexual activity can be very dangerous for an adolescent that is just entering this transitional stage of life. The publication explains three main complications that could arise from precocious sexual activity including peer delinquency, damaged family relationships, and a lack of involvement in academic activities. The author specifies that becoming deeply involved in romantic relationships at young ages allows these adolescents to be that much more vulnerable to bad influences, such as sexting in this case. Essentially, the results in this dissertation were compelling, elucidating that opposite sex relationships with young adolescents allow them to be increasingly at risk for delinquent behavior. For males it appears that early sexual activity may be the key risk, and for females simply making early friendships with opposite sex can make them vulnerable to delinquency (Kierkus, 2007).

An absent father has been shown to predispose females to more sexual promiscuity and an earlier onset age for first sexual intercourse. It is believed that this may also be a possible precursor for females engaging in sexting. In a recent longitudinal study, data from adolescent females with an absent father and females with a father in the home were compared. The age of first sexual intercourse was examined and the comparisons replicated previous studies showing that females who grew up without a father in the home had an earlier ago of first sexual intercourse. The mean age for sexual intercourse with females without a father was 15.28 and 16.11 for adolescent females with a present father figure (Mendle et al. 2010). A female's first sexual intercourse is an extremely important developmental milestone, and these results provide evidence for the importance of a father figure in a female's developmental life. The link

between family factors and sexually activity is extremely important, with research showing even more so in females. In 1995, Walsh found that decreased parental involvement in an adolescents life, showed increased promiscuity in females during their college years. Thus, there may be a possible correlation between females who engage in sexting and females who report an absent father figure in their home.

The role of the family as an influential agent in an adolescent's life has received a prolific amount of research throughout the years. The idea of having both biological parents in the home throughout development has shown to be one of the primary causes for keeping adolescents away from delinquency. Research on this topic has been evolving since 1958 when F. Ivan Nye's classic study on how a "broken home" and a happy marriage are key components in the development of delinquent behavior. Moreover, social control theory has illustrated how family dynamics play an influential role in an adolescent's life since a family is a child's first socializing agent. Reiss in 1951 stated that the key causal effect of delinquency is this lack of control that children have due to weakened parental attachments, meaning poor parenting. This idea of family dynamics was researched nearly forty years later, and similar results were found. Gottfredson & Hirshi in 1990 explained that delinquent children do not have self-control caused by a lack of parenting and attachment. They stated, "In the absence of socialization the child will tend to be high on crime potential" (Gottfredson & Hirschi, 1989: 61). Children learn from their parents that immediate gratification must be controlled, thus adolescents without involved parents are unlikely to learn this idea of self-control. The result of these uncontrolled desires is often delinquency and anti-social behaviors. These ideas directly relate to the hypothesis that females with an absent father in the home are more likely to become involved with risky behavior such as sexting. Adolescents need direct supervision which makes it much more

unlikely that they will become involved in precarious situations such as sexting. Although both a mother and a father are vital for adolescents as they develop and change, a female's need for a male role model is essential in helping them form safe and responsible opposite sex relationships (Hirschi, 1969).

Additionally, when looking at the male gender, it is predicted that males who engage in sexting will be more likely to report having a past history of rule breaking behavior. A prolific amount of research has shown that males with anti-social behavioral tendencies and conduct disorders will be more likely to engage in risky sexual behavior. In a recent 2009 study, experimenters found that risky sexual behavior is associated with adolescent misconduct. In a study done with over 4,000 participants, the subjects were instructed to complete a survey regarding their sexual behaviors and attitudes, as well as a self-report on a recall of their adolescent misbehaviors. Ultimately, researchers found that juveniles with misconduct behavior in adolescence are more likely to develop risky sexual behavioral patterns (Verweij et al. 2009). This data is evidence that males who commit crimes in their youth may be more vulnerable to partake in high-risk sexting behavior.

In a similar research publication, it was shown that there is a correlation between male adolescents who are sexually active and an elevated risk of delinquent behavior. Results indicate that sexual activity in young males and anti-social behavior appears to be directly related to one another. The study also tested whether young males who are simply dating and socialize in opposite sex peer groups are also at risk for delinquent behavior. Yet, the data illustrated, that the primary cause for young adolescents to engage in delinquent behavior is precocious sexual activity (Kierkus, 2007). Moreover, the field of developmental criminology is beginning to see how early sexual behavior is highly correlated with delinquent behavior, especially in the male

gender. "The behavioral disruption, stress and structural disadvantage caused by precocious transitions can...increase the probability of deviance" (Smith et al., 2000: 234). This quote suggests how risky sexual behavior can lead to criminogenic effects for adolescents due to developmental problems. It is important to note that becoming involved with the opposite sex as an adolescent is a part of the normal life cycle, but when the male adolescent is too precocious in this sexual activity, problems arise developmentally and they are more likely to engage in rule breaking behavior.

Methods

Subjects

130 male and female undergraduates from the University of Arizona's INDV101 Structure, Mind, and Behavior subject pool participated in the present study. This number of participants was chosen in order to attain the appropriate effect size for the number of predictors in the model while still controlling for the level of type I error.

Materials and Stimuli

The Youth and Young Adult "Sexting" Behavior and Demographic Characteristics

Questionnaire was to be used to measure the predictors for individuals who engage in sexting via the cell phone as seen in Appendix A. This questionnaire was conducted exclusively online. The questionnaire is composed of 107 questions that are divided into five different sections. The first section asks the participant basic background questions about themselves. These questions will

address previous experiences as well as their current life. Sample questions from this section may ask at what "age did you first engage in sexual intercourse?" The participant is then asked to write in their age or check I have not engaged in sexual intercourse. In section two, the participant is asked to answer questions about "sexting behaviors". A sample question from this section asks, "At what age did you first send a "sext" of any kind (seminude, nude, picture, video, etc.)? We are defining "sexting" as sending or receiving sexual pictures or videos by cell phone. The participant must check "0" indicating that have never sent a sext, "8-12" times, "13-16", "17-18", "19-24", or they must specify another number. Section three asks questions about past rule-breaking and criminal behavior. A sample question from this section asks, "How many times have you ever been arrested or referred to the court (juvenile, adult, criminal, or civil, etc.?) Participants must check either 0, 1, 2-5, more than 5 times, or specify another number. Section four asks participants to answer questions about their history of mental health, as well as some general questions about mental health. A sample question from this section asks "Have you ever talked to a psychiatrist, psychologist, therapist, social worker, or counselor about an emotional problem? Participants must check either "Yes" or "No". In the last part of the questionnaire, section five; participants must answer questions about their opinions and knowledge regarding the legality of sexting. A sample question from this section asks "Are you aware that "sexting" is illegal for those under the age of 18?" Participants must check either "Yes" or "No".

Procedure

To partake in this study, participants signed up for a one-hour time slot on the University of Arizona psychology experiments website. Once they have did this, the participants received in an email a direct link to the questionnaire. The disclaimer, the instructions, as well as an explanation for the purpose of the experiment was contained in the questionnaire. The participants were allowed to complete the online questionnaire in any location that was convenient. This is done for reasons of confidentiality and comfort of the participant. The questionnaire will take about an hour to complete. The participants were also required to sign up for part two of the study, which was the debriefing. During the half-hour debriefing, the participants received information about whom to contact if they have any feelings of discomfort in response to completing the questionnaire for the experiment. Additionally, the subjects learned the objectives for the current study and received background information on sexting and its legal ramifications. In total, the participants received three experiment credits for this study, two for the questionnaire and one for the debriefing. The University of Arizona Institutional Review Board and the Psychology Department approved this study.

Results

The total number of participants was 130. Ten participants were removed from the sample because they completed less than 50% of the questionnaire. One additional participant was removed when it was determined that their responses were inconsistent and seemingly random. The final sample was 119. The average age of the participants was 18.98 years old. Males made up 39.2% of the sample and females made up 57.5%. Four participants did not indicate their sex. 73.3% of the participants were in their first year of college, 20% were in their

second, and the remaining participants were in their third or fourth years of their undergraduate education. Sixty nine percent of the sample identified as Caucasian, 13.3% as Hispanic, 10.8% as Asian, and the remaining 4.6% identified as Pacific Islander, Persian, or Native American. In terms of socioeconomic status 1.7% of individuals identified as having an income of less than \$16,000 annually, 11.8% reported an income of \$16,000 to \$30,000, 33.6% reported an income \$35,000 to \$75,000, 42% reported an income \$100,000 to \$500,000.

In terms of sexting, 41% of the sample reported having received some sort of sext, 32% reported sending some sort of sext, and 27% reported engaging in neither behavior as seen in Figure 1. Interestingly, only 21% of the subjects reported being involved in both receiving and sending sexts. Further breaking down sexting behaviors, 42% of individuals reported receiving nude sexts, 20% reported sending seminude sexts, 15% reporting sending nude sexts, and 14% reported receiving seminude sexts as seen in Figure 2. In terms of breaking down the frequencies of individuals who report engaging in sexting a majority of individuals reported that only sending or receiving 1-10 sexts (95%) as seen in Figure 3. In examining the relationship between sexting and these demographic variables, sexting was separated into categories of either sending or receiving, and then further separated into seminude or nude. A series of one-way ANOVAs and Chi-Square analyses was undertaken to determine if individuals who engaged in sexting were different based on demographic characteristics. Age was not significantly related to sending seminude sexts F(1, .255)=.186, p=.667, sending nude sexts F(1, 2.434)=1.803, p=.182, receiving seminude sexts F(1, .750)=.549, p=.460, or receiving nude sexts F(1, .976)=.715, p=.399. It should be noted that the age in this sample was extremely restricted; over 80% of the sample was under the age of 20.

SEXTING ___18

Figure 1

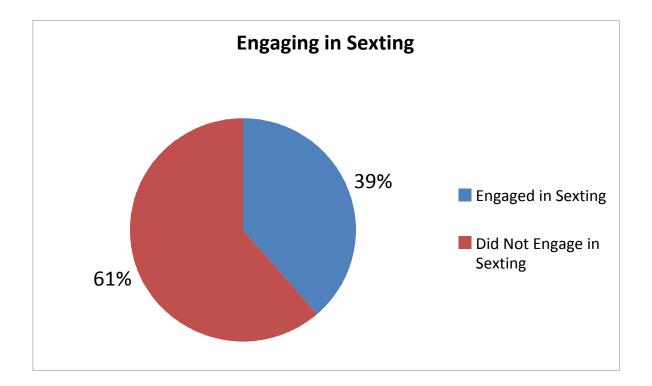


Figure 2

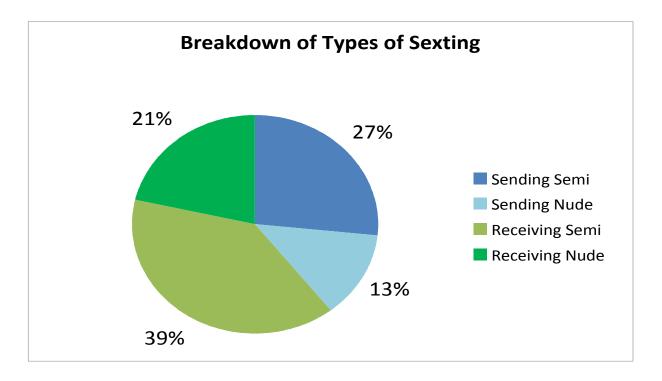
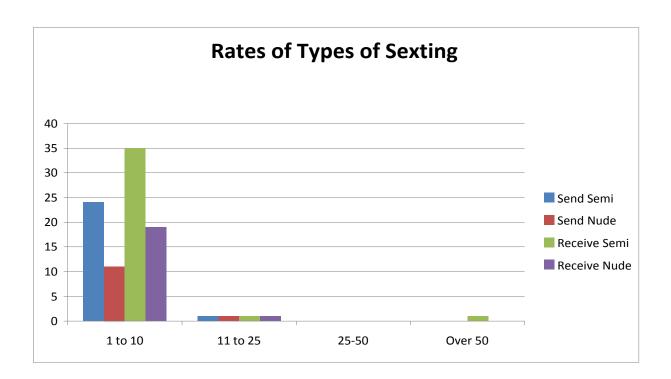


Figure 3



There did not appear to be a relationship between sex and sending seminude sexts, X2 (1, 115)=1.917, p=.266, sending nude sexts X2 (1, 115)=.151, p=.698, receiving seminude sexts X2 (1, 115)=.531, p=.466, or receiving nude sexts X2 (1, 115)=.889, p=.346]. It should be noted that that cells in several cases had lower than expected numbers (i.e. very few individuals sent nude sexts at all), which could indicate problems with generalizability (though these should be addressed with an increased sample size).

Chi-squared analyses were conducted in order to examine hypotheses related to a history of child sexual abuse. The first analysis examined the relationship between a history of child sexual abuse and sending seminude sexts, and no relationship was found X2 (1, N=119)=.287, p=.592. This was also true of child sexual abuse receiving seminude sexts X2 (1, N=119)=.885, p=.347, and receiving nude X2 (1, N=119)= 1.393, p=.238. However, there was a relationship between sending nude sexts and reported history of child sexual abuse X2 (1, N=119)= 3.949, p=.047. It should be noted that the number of individuals who indicated a history of child sexual abuse in the sample was only 11, which created smaller than expected counts in several of the cells. Therefore, the generalizability of the results should be approached with caution until a larger sample is collected.

A series of ANOVAs were completed to examine the significant differences between individuals who did and did not engage in sexting on a variety of sexual behaviors and their extent. This includes the age of onset of sexual touching behavior as well as the number of partners with whom the participant estimates they have engaged in sexual touching, the age of onset of oral sex as well as the estimated number of partners, and age of onset of sexual intercourse as well as the estimated number of partners. Please see Table 1 for the complete results. No significant differences between individuals who engaged in sexting and those who

did not were found in regards to either the age of onset for sexual intercourse or the estimated number of partners. A significant difference in terms of age of onset for sexual touching was found for individuals who engaged in sending nude sexts and those who did not (average ages of 14.25 and 15.43, respectively) as seen in Figure 4. A significant difference between individuals who received seminude sexts and those who did not was found in regards to both age of onset of sexual touching (average ages of 14.72 and 15.61), and estimated number of sexual touching partners (average number of partners 2.5 and 1.88) shown in Figure 5. This pattern of significant differences was found in regards to receiving nude sexts as well (average ages of 14.5 and 15.46; average number of partners 2.67 and 1.98). Additionally, a significant difference was found between individuals who received seminude and nude sexts and those who did not in regards to age of onset of oral sex (average age receiving seminude 15.72, not receiving 16.35; average age of receiving nude 15.41, not receiving 16.29). A significant difference was also found in regards to number of partners and receiving or not receiving seminude sexts (2.06 and 1.67). These differences can be seen in Figure 6 and Figure 7. Table 1 shows the differences between sexters and non-sexters in regards to the sexual behavior they have engaged in, and at what age it occurred.

| Table 1- Dif Sexual Beha | | xters and Non-Sexter | s in Regards to | |
|-----------------------------|-----------------------------|---------------------------|---------------------|-----------------------------|
| | Sending | | | |
| | Age of Onset | | Number of Partners | |
| | Sending Seminude | Sending Nude | Sending Seminude | Sending Nude |
| Sexual Touching | F(1, 4.007)=.635, p=.428 | F(1, 2)=4.904, p=.029* | F(1, 3.186)=2.215, | F(1, 3.203)=2.227 p=.139 |

| Sexual Touching | F(1, 4.007)=.635, p=.428 | F(1, 2)=4.904, p=.029* | F(1, 3.186)=2.215, p=.14 | F(1, 3.203)=2.227 p=.139 |
|-----------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------------|
| Oral Sex | F(1, 2.512)=.1.041, p=.311 | F(1, 5.193)=.2.181, p=.144 | F(1,.0341)=3.241, p=.571 | F(1,.105)=.099, p=.754 |
| Sexual Intercourse | F(1, 3.266)=1.55, p=.217 | F(1, 4.844)=2.321, p=.132 | F(1, 1.274)=1.233, p=.27 | F(1, .639)=.614, p=436 |
| | | | | - |
| | | Receiving | | |
| | Age of Onset | | Number of Partners | |
| | Receiving Seminude | Receiving Nude | Receiving Seminude | Receiving Nude |
| Sexual Touching | F(1, 18.197)=6.086 p=.015* | F(1, 13.784)=4.543 p=.036 | F(1, 8.989)=56.513 p=.012* | F(1,7.067)=5.05 p=.027* |
| Oral Sex | F(1, 7.908)=3.369 p=.007** | F(1, 10.376)=4.479 p=.037* | F(1, 5.184)=5.216, p=.025* | F(1,2.079)=2.014, p=.16 |
| Sexual Intercourse | F(1, 4.007)=1.91, p=.171 | F(1, 7.648)=3.728, p=.057 | F(1, 3.093)=3.063, p=.084 | F(1,1.889)=1.842, p=.179 |
| *=p<.05, | <u> </u> | | | |

Figure 4

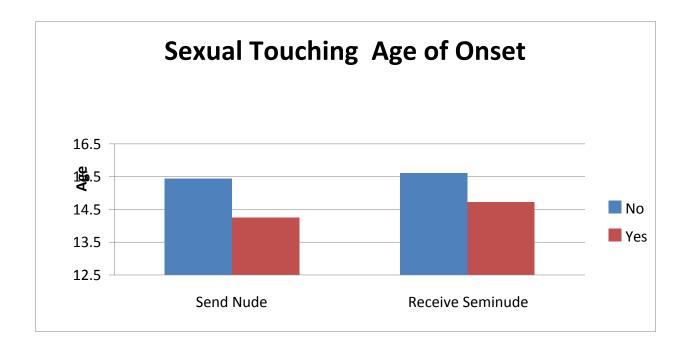


Figure 5

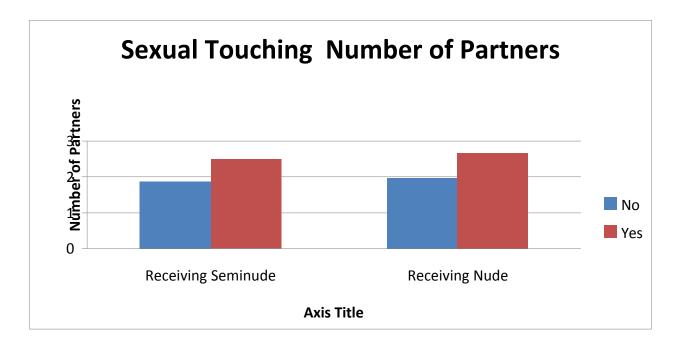


Figure 6

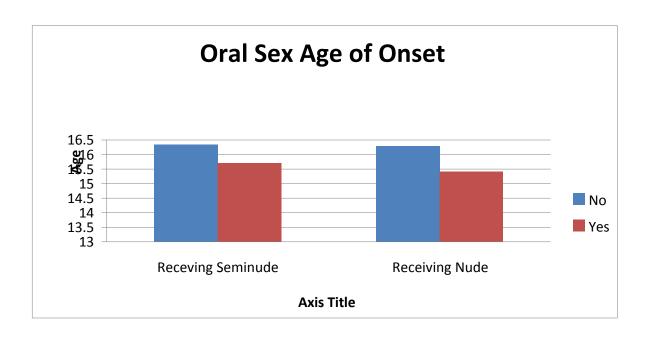
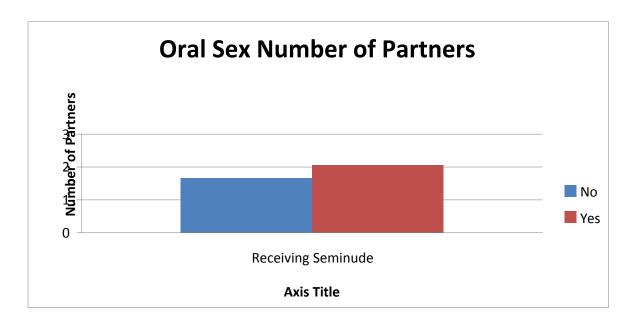


Figure 7



Chi-squared analyses were examined on a sub-sample comprising of only the female subjects in order to determine if there was any relationship between an absence of biological father during childhood and engaging in sexting behaviors. When examining sending seminude sexts, there was no apparent relationship X2(1, N=69)= .282, p=.595. This was also true of sending nude sexts, X2(1, N=69)=.076, p=.783, receiving seminude sexts X2(1, N=69)=1.825, p=.177, and receiving nude sexts X2(1, N=69)=.034, p=.854.

A series of ANOVAs were completed in order to determine if there was a relationship between a variety of rule-breaking indicators and sexting for the male only subset of the sample.

In terms of drug use no significant differences were found between individuals who did and did not send seminude sexts F(1, 1.457)=.875, p=.355, send nude sexts F(1, 1.551)=.933, p=.340, receiving semi-nude sexts F(1, .842)=.510, p=.483, or receiving nude sexts F(1, .148)=.087, p=.770.

In terms of suspension from school no significant differences were found between individuals who did and did not send seminude sexts F(1,2.997)=1.439, p=.237, send nude sexts F(1,7.731)=3.915, p=.054, receive seminude sexts F(1,4.515)=2.205, p=.145, receive nude sexts F(1,5.954)=2.955, p=.093. In terms of arrests for a crime, no significant differences were found between individuals who did and did not send seminude sexts F(1,215)=3.44, p=.560, send nude sexts F(1,520)=840, p=.364, receiving seminude sexts F(1,003)=0.04, p=.947, receiving nude sexts F(1,009)=0.015, p=.903.

Discussion

The results show that there is indeed a relationship between sexting and different social and developmental factors. However, this relationship is still not clearly defined and if anything that data appears to be suggesting that sexting is not associated with extremely serious behavior.

The relationship of interest that is seen in the data shows a significant difference between having a history of child sexual abuse and sending nude sext messages. This is consistent with the findings in Niehaus's (2010) experiment showing that youth who have a prior history of being sexual abused are more at risk to be sexually promiscuous. This is due to the fact that sexually abused children often develop abnormal sexual patterns, thus they do not comprehend the risks associated with risky sexual behavior such as sexting. Child sexual abuse can affect an individual's judgments and feelings about themselves as sexual beings, thus making them more vulnerable to participating in the act of sending a nude photo of themselves. Of course, based on previous research it would be also be reasonable to expect that a history of child sexual abuse would lead to an increase across the different sexting behaviors. The fact that a significant relationship was only found between child sexual abuse and sending nude sexts could be

indicative of several things. Once is that sending a nude sext is a much riskier behavior and is therefore much more likely to be affected by child sexual abuse. It is also possible that the size of the sample and small number of participants reporting child sexual abuse adversely affected our ability to detect relationships on these variables.

Furthermore, the results indicated that those who engaged in sexting were more likely to have engaged in sexual touching at a younger age. This is consistent with the results of the study done by O'Donnell in 2001, illustrating that individuals who have an earlier onset of sexual behavior are more likely to participate in risky sexual behavior as they mature. Engaging in sexual touching at a younger age can interrupt that transitional period from childhood to adolescence where the brain is developing to understand becoming a sexual being. Thus, leading to risky sexual behavior later on in life such as sexting in the current study. Interestingly, engaging in sexual intercourse at a younger age did not indicate any correlation with sexting like sexual touching did. This could be a sign that sexting may be related to less risky sexual behavior such as simply touching another person, compared to a sexual behavior as serious as sexual intercourse.

In regards to females growing up without a father and sexting, there was no significant difference. The subset of college-aged students used in this experiment may also have affected the results, since the majority of subjects appeared to come from upper-middle class families. Thus, the group of participants was not a realistic sample of the general population. Additionally, less than 10% of the sample stated that they had no father present in their home growing up. Yet, if these results are accurate then family dynamics may not play a role in sexting behavior. This would show that sexting may be much more of an internal problem than was anticipated, and outside forces such as parental presence may not be as important.

Furthermore, the data indicated no significant differences between rule breaking behaviors such as drug use, suspensions, and/or arrests for a crime and sexting. The sample size and make-up must once again must be considered as a limitation for these hypotheses. Since these are all college students the level of rule-breaking behavior may be attenuated from the population at large. It is also believed that the idea of rule-breaking behavior is quite extensive and the questionnaire may not have encapsulated enough questions to cover the wide range of rule-breaking behaviors. If this data is indeed accurate, rule-breaking behaviors may have no relation to sexual behaviors, in this case sexting. Thus, males without delinquent tendencies are just as vulnerable to risky sexual behaviors as are males with criminal records.

The limitations to this research study must be mentioned as to encourage caution when generalizing the results of the data. The fact that it is simply a correlational study illustrates that we cannot infer any causality from the results. It is highly likely that even for those cases where significant relationships between sexting and behavior were found, a common third variable was causing both behaviors. Due to the small sample of participants utilized in this research study, it is difficult to make any generalizations from the results, so a larger sample would be beneficial in the future. To illustrate, only 11 of the 130 participants reported having been sexually abused as children, thus it is difficult to ascertain any generalizations until a larger sample size is collected. Increasing the number of participants would also allow for more complex analyses to be undertaken; examining moderating and mediating relationships as well as other more complex interactions between variables for example. Additionally, the questionnaire is self-report and retrospective which is more vulnerable to error. In self-report questionnaires, participants may often not be completely truthful in their answers, especially in this study due to the personal questions asked. It could be beneficial to include a social desirability scale in future versions of

the questionnaire. Another important weakness is that the present study was done with individual's ages 18 and up and their experiences may be significantly different than children who are involved in sexting today due to technological advances. Essentially, using collegeaged students is a stepping-stone before utilizing this questionnaire on younger children.

For future research, it will be beneficial to conduct a sexting study with a cross-sectional of grade school aged youth, which would allow experimenters to make further causal connections. Another significant limitation to note about the participants is that from the general data collected from the surveys, the majority of the participants were Caucasian and uppermiddle class. This in turn weakened any further generalizations we could make about sexting, as it did not include a realistic subset of the population. Finally, the possibility that other variables may have affected that data must be considered since this is a preliminary study. To illustrate, a third variable such as puberty may have been the actual correlation between some of the hypotheses. Yet, the present research will still provide new insights into the risk factors for becoming involved in such sexually explicit behavior.

Although the data for the present study did not corroborate all the hypotheses, the implications for such research are monumental. Due to the dearth of research in the area of sexting, prevention programs and strategies have not been formulated yet. It is important to learn possible correlations associated with such risky behavior before implementing programs into schools. Thus, with new and innovative research on the precursors for sexting behavior, it is believed that schools nationwide will better be able to handle this new phenomenon, and provide resources for students who engage in such risky behavior.

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Appendix A

Youth and Young Adult: "Sexting" Behavior and Demographic Characteristics

Directions

On the following pages you will find a series of questions. Some of the questions ask you to select one of the answers, some ask you to select multiple answers, and some ask you to write in an answer At the start of each section will be a series of directions.

Please pay attention to what the questions are asking and try to be as honest as possible.

Remember, all of your responses are completely confidential and anonymous and, though we encourage you to answer all questions, you may skip questions if needed.

You must be 18 or above to continue. By continuing you are indicating that you are 18 y above.



| Section 1 | | | |
|--|---|--|-----------------------|
| | | | |
| In this section you be answering some basic background questions about yourself. These questions will address multiple aspects of your previous experiences as well as your current life. | | | |
| | Some of the questions will ask you to write in answers, some will ask you to choose many from a list, and others will ask you to only choose one. | | |
| While answering, remember that all your responses are completely confidential and anonymous so try to be as honest as possible. Though we encourage you to answer all questions, you may skip questions if needed. | | | |
| If you do not feel that you know the most accurate answer, take your best guess. | | | |
| 1. | What is your age? | Please write in your ans | swer: |
| | | You must be 18 years o | or older to continue. |
| 2. | What is your sex? | ☐ Male ☐ Female | |
| 3. | What year are you in college? | 1 2 3 | 4 5 |
| 4. | Which of the following best applies to you? | ☐ Single ☐ Married/Partnered ☐ In a relationship | |
| 5. | Do you have any children? | Yes No | If yes, how many? |
| 6. | What is your race/ethnicity? | Please choose all that a Caucasian African American Hispanic Asian Pacific Islander Native American Other (please specific | |
| 7. | What is your primary language? | Please choose all that a English Spanish Other (please specification) | |

| 8. | With whom did you live for the majority of your childhood (until you were age 18)? | Please choose all that apply: Mother Father Brother(s) Sister(s) Grandmother Grandfather Other (please specify): | ☐ Aunt ☐ Uncle ☐ Cousin ☐ Friend ☐ Alone ☐ Boy/Girlfriend ☐ Spouse/Partner |
|-----|--|---|--|
| 9. | If you did not select father, was your father ever present for any amount of time in your household? | Yes No | If yes, for how long? |
| 10. | How would describe the economic status of your family (or, when appropriate, yourself)? | Lower-Middle Class Upper-Middle Class \$500,000) | e below \$16,000) ome \$16,000 to \$30,000) s (Income of \$35,000 to \$75,000) s (Income of \$100,000 to e of \$500,000 or more) |
| 11. | What is your sexual orientation? | Straight Bisexual Gay (if respondent is Lesbian (if responde Other (please specif | ent is female) |
| 12. | Which of the following best describes your religious affiliation? | Methodist, Catholic, Lu | angelical Christian ist of Latter-Day Saints on |

ı

| 13. | How spiritual would you say you are? | Not at all Somewhat Extremely |
|-----|--|---|
| | | 1 2 3 4 5 |
| | | |
| | | |
| | | |
| 14. | How often do you attend religious services? | More than once a week |
| | | More than once a week |
| | | Once a week |
| | | Once a month |
| | | A few times a year |
| | | Once a year |
| | | Once every few years |
| | | Never Never |
| 15. | How often do you use a computer? | Daily |
| | | Weekly |
| | | Monthly |
| | | Never |
| 1.0 | | I don't own a computer |
| 16. | How often do you use a cell phone? (for calls, texting, internet access, email | Once a day |
| | access, games, etc.) | Multiple times a day |
| | | Most of the day, most days Never |
| | | I don't own a cell phone |
| 17. | Where would you say you have learned the | |
| | most about sex? | Family Friends |
| | | School |
| | | Church |
| | | Other (please specify): |
| | | |
| 18. | At what age did you first engage in sexual touching with another person (i.e. touching | Please write in your age where appropriate: |
| | the breasts, buttocks, or genital area above | |
| | the clothing of another person)? | ☐ I have not engaged in sexual touching |
| | | |
| | | |
| | | |

| 19. | With how many partners have you engaged in sexual touching with? | ☐ 0 ☐ 1-3 ☐ 4-6 ☐ 6-10 ☐ More than 10 ☐ Other (please specify): |
|-----|---|--|
| 20. | At what age did you first engage in oral sexual contact? | Please write in your age where appropriate: I have not engaged in oral sexual contact |
| 21. | With how many partners have you engaged in oral sexual contact? | ☐ 0 ☐ 1-3 ☐ 4-6 ☐ 6-10 ☐ More than 10 ☐ Other (please specify): |
| 22. | At what age did you first have sexual intercourse? | Please write in your age where appropriate: I have not engaged in sexual intercourse. |
| 23. | With how many partners have you engaged in sexual intercourse with? | ☐ 0 ☐ 1-3 ☐ 4-6 ☐ 6-10 ☐ More than 10 ☐ Other (please specify): |
| 24. | How often do you look at pornography? | Never A few times a year Once a month Once a week Several times a week Every day |

| | | Other (please specify): |
|-----|--|---|
| | h statement and then circle the number to sl | used to describe themselves are given below. Read now how well you believe the statement describes |
| 25. | My sexual appetite has gotten in the way of my relationships. | Not at all like me Slightly like me Mainly like me Very much like me |
| 26. | My sexual thoughts and behaviors are causing problems in my life. | Not at all like meSlightly like meMainly like meVery much like me |
| 27. | My desires to have sex have disrupted my daily life. | Not at all like meSlightly like meMainly like meVery much like me |
| 28. | I sometimes fail to meet my commitments and responsibilities because of my sexual behaviors. | Not at all like meSlightly like meMainly like meVery much like me |
| 29. | I sometimes get so horny I could lose control. | Not at all like meSlightly like meMainly like meVery much like me |
| 30. | I find myself thinking about sex while at work. | Not at all like meSlightly like meMainly like meVery much like me |
| 31. | I feel that sexual thoughts and feelings are stronger than I am. | Not at all like meSlightly like meMainly like meVery much like me |
| 32. | I have to struggle to control my sexual thoughts and behavior. | Not at all like meSlightly like meMainly like me |

| 32. | I have to struggle to control my sexual thoughts and behavior. | Not at all like meSlightly like meMainly like meVery much like me |
|------|--|--|
| 33. | I think about sex more than I would like to . | Not at all like meSlightly like meMainly like meVery much like me |
| 34. | It has been difficult for me to find sex partners who desire having sex as much as I want to. | Not at all like meSlightly like meMainly like meVery much like me |
| give | • • • | ed to describe their thoughts about women have been the response to show how well you believe the statement |
| 35. | In dating relationships people are mostly out to take advantage of each other. | ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree |
| 36. | If you don't show who's boss in the beginning of a relationship you will be taken advantage of later. | ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree |
| 37. | Most people are pretty devious and manipulative when they are trying to attract someone of the opposite sex. | Strongly Agree Agree Disagree Strongly Disagree |
| 38. | Men and women are generally out to use each other. | ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree |
| 39. | It's impossible for men and women to truly understand each other. | ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree |
| 40. | In the work force any gain by one sex necessitates a loss for the other. | Strongly Agree Agree |

| 41. | When women enter the work force they are | Strongly Agree |
|------|--|--|
| | taking jobs away from men. | Agree |
| | | Disagree |
| | | Strongly Disagree |
| 42. | Men and women cannot really be friends. | Strongly Agree |
| | | Agree |
| | | Disagree |
| | | Strongly Disagree |
| 43. | Sex is like a game where one person "wins" | Strongly Agree |
| | and the other "loses." | Agree |
| | | Disagree |
| | | Strongly Disagree |
| 44. | In all societies it is inevitable that one sex is | |
| 7-7- | dominant. | Strongly Agree |
| | | Agree |
| | | Disagree |
| | | Strongly Disagree |
| | · · · · | ed to describe their thoughts about the relationship Read each statement and then select the response to |
| | w how well you believe the statement describes | |
| 45. | In dating relationships people are mostly out | Strongly Agree |
| | to take advantage of each other. | Agree |
| | | Disagree |
| | | Strongly Disagree |
| 46. | If you don't show who's boss in the | Strongly Agree |
| | beginning of a relationship you will be taken | Agree |
| | advantage of later. | Disagree |
| | | Strongly Disagree |
| 47. | Most people are pretty devious and | |
| 47. | manipulative when they are trying to attract | Strongly Agree |
| | someone of the opposite sex. | Agree |
| | | Disagree |
| _ | | Strongly Disagree |
| 48. | Men and women are generally out to use each other. | Strongly Agree |
| | each other. | Agree |
| | | Disagree |
| | | Strongly Disagree |
| 49. | It's impossible for men and women to truly | Strongly Agree |
| | understand each other. | Agree |
| | | Disagree |

| | | Strongly Disagree |
|-----|--|---|
| 50. | In the work force any gain by one sex necessitates a loss for the other. | Strongly Agree Agree Disagree Strongly Disagree |
| 51. | When women enter the work force they are taking jobs away from men. | Strongly Agree Agree Disagree Strongly Disagree |
| 52. | Men and women cannot really be friends. | ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree |
| 53. | Sex is like a game where one person "wins" and the other "loses." | ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree |
| 54. | In all societies it is inevitable that one sex is dominant. | ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree |
| 55. | It is natural for one spouse to be in control of the other. | Strongly Agree Agree Disagree Strongly Disagree |
| 56. | When it comes to sex, most people are just trying to use the other person. | ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree |
| 57. | It is possible for the sexes to be equal in society. | ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree |
| 58. | Men and women share more similarities than differences. | Strongly Agree Agree Disagree |

| 59. | than di | nd women share more similarities ifferences. ssible for a man and a woman to be iends." | ☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐ Strongly Agree ☐ Agree ☐ Agree | |
|-----|---------|--|--|--|
| | | | ☐ Disagree ☐ Strongly Disagree | |
| | | | sed to describe what they think about men women are ethe statement which better describes you. | |
| 60. | | | ach pay for their own expenses on a date | |
| | | Men should always be ready to accep | t the financial responsibility for a date. | |
| 61. | | I would rather be a famous scientist t | han a fashion model | |
| | | I would rather be a famous fashion m | odel than a famous scientist. | |
| 62. | | I like a man who has some sexual exp | erience | |
| | | Sexual experience is not a relevant factor in my choice of male partner | | |
| 63. | | Women should never break up a friendship due to interest in the same man. | | |
| | | Sometimes women have to compete with one another for men. | | |
| 64. | | I like to play hard-to-get. | | |
| | | I don't like to play games in a relationship. | | |
| 65. | | I would agree to have sex with a man if I thought I could him to do what I want. | | |
| | | I never use sex as a way to manipulate a man. | | |
| 66. | | I try to state my sexual needs clearly a | and concisely. | |
| | | I sometime say "not" but really mean "yes" . | | |
| 67. | | I like to flirt with men. | | |
| | | I enjoy an interesting conversation with a man. | | |
| 68. | | I seldom consider a relationship with a man as more important than my friendship with women. | | |
| | | I have broken dates with female friends when a guy has asked me out. | | |
| 69. | | I usually pay for my expenses on a da | te. | |
| | | I expect the men I date to take care o | f my expenses. | |
| 70. | | Sometimes I cry to influence a man. | | |
| | | I prefer to use logical rather than emo | otional means of persuasion when necessary. | |
| | | | | |

| 72. | | I never use my sexuality to manipulate men. | | |
|-----|----------|--|--|--|
| | | I sometimes act sexy to get what I want from a man. | | |
| 73. | | I feel anger when men whistle at me. | | |
| | | I feel a little flattered when men whistle at me. | | |
| 74. | | It's okay for man to be a little forceful to get sex. | | |
| | | Any force used during sex is sexual coercion and should not be tolerated. | | |
| 75. | | Effeminate men deserve to be ridiculed. | | |
| | | So-called effeminate men are very attractive. | | |
| 76. | | Women who are good at sports probably turn men off. | | |
| | | Men like women who are good at sports because of their competence. | | |
| 77. | | A "real" man is one who can get any woman to have sex with him. | | |
| | | Masculinity is not determined by sexual success. | | |
| 78. | | I would rather be president of the US than the wife of the president. | | |
| | | I would rather be the wife of the president of the US than the president. | | |
| 79. | | Sometimes I care more about my boyfriend's feelings than my own. | | |
| | | It is important to me that I am as satisfied with a relationship as my partner is. | | |
| 80. | | Most women need a man in their lives. | | |
| | | I believe some women lead happy lives without male partners. | | |
| 81. | | When a man I'm with gets really sexually excited, it's no use trying to stop him from getting what he wants. | | |
| | | Men should be able to control their sexual excitement. | | |
| 82. | | I like to have a man "wrapped around my finger." | | |
| | | I like relationships in which both partners are equal. | | |
| 83. | | I try to avoid jealousy in a relationship. | | |
| | | Sometimes women need to make men feel jealous so they will be more appreciative. | | |
| 84. | | I sometimes promise to have sex with a man to make sure he stays interested in me. | | |
| | | I usually state my sexual intentions honestly and openly. | | |
| 85. | | I like to feel tipsy so I have an excuse to do anything with a man. | | |
| The | followir | ng questions have to do with experiences you may have had as a child or adult. | | |
| | | | | |
| 86. | | If yes, how old were you ne recipient of unwanted sexual tr? Yes If yes, how old were you? Family member Friend Stranger Acquaintance Someone you | | |

| | | | If yes, how long did this abuse last? | |
|-----|--|--------|---|---|
| | | | | How old was the individual (s) at the time? |
| 87. | As an adult (over the age of 18), have you ever been the recipient of unwanted sexual contact? | Yes No | If yes, by whom? Family member Friend Stranger Acquaintance Someone you dated Other (please speci | |
| 88. | Have you ever forced someone to have sexual contact with you when they did not want to? | Yes No | | |

| Section 2 | | | |
|---|--|--|---|
| In this section yo | ou be answering so | ome questions about se | xting behaviors |
| We are defining | sexting as sending | g or receiving sexual pict | tures or videos by cell phone. |
| | | rided into Sending and F ch section you are on. | Receiving, and further split into Seminude and |
| The following qu | uestions refer only | to the last six months . | |
| | estions will ask you ou to only choose | | me will ask you to choose many from a list, and |
| as honest as pos | sible. If you do no | ot feel that you know th | ompletely confidential and anonymous so try to be e most accurate answer, take your best guess. ay skip questions if needed |
| | 6 "SEXTS" on 2a | · · | on will deal exclusively with sending "sexts". you have sent of yourself to other people. |
| 89. | At what age did you first send a "sext" of any kind (seminude, nude, picture, video, etc.)? sexting | | O, I have never sent a "sext" of any kind (seminude, nude, picture, video, etc.) 8-12 13-16 17-18 19-24 Other (please specify): |
| | "0, I have never setion number to th | • | (seminude, nude, picture, video, etc.)" please |
| Sending "Sexts" Section 2a Semi-nude For men: bare chest showing and/or only wearing a bathing suit or wearing underwear For women: wearing only a bathing suit or only wearing underwear | | n. | |
| 90. | seminude pictur yourself (of men and/or only wea only wearing und wearing only a b wearing underw using your cellula | onths, how many res or videos of : bare chest showing ring a bathing suit or derwear; of women: athing suit or only ear) have you sent ar phone? | ☐ 0 ☐ 1-10 ☐ 11-25 ☐ 26-50 ☐ Over 50 |
| ~ | Sending "Sexts" The following questions will ask about sending semi-nude "sexts". For the | | |
| Section 2a purposes of this section. Semi-nude | | | |

| | wearing underwear | owing and/or only wearing a bathing suit or only |
|-----|--|---|
| | For women: wearing of | nly a bathing suit or only wearing underwear |
| 91. | How many of the seminude pictures or videos of yourself included your face? | ☐ 0 ☐ 1-10 ☐ 11-25 ☐ 26-50 ☐ Over 50 |
| 92. | How many of these seminude pictures or videos show you engaged in sexual activity (for example: kissing, masturbating or touching your genitals/breasts, sexual rubbing with a partner, etc.)? | ☐ 0 ☐ 1-10 ☐ 11-25 ☐ 26-50 ☐ Over 50 |
| 93. | How many of the seminude pictures or videos of yourself were requested by the people/person you sent them to? | ☐ 0 ☐ 1-10 ☐ 11-25 ☐ 26-50 ☐ Over 50 |
| 94. | How would you describe your relationship with the people/person you generally sent the seminude pictures or videos of yourself to? | Choose all that apply: Stranger Acquaintance Friend Someone I wanted to be dating Girlfriend/Boyfriend Person I had an active sexual relationship with Other (please specify): |
| 95. | To best of your knowledge, what age was the oldest person you sent seminude pictures or videos of yourself to? | ☐ 8-12 ☐ 13-16 ☐ 17-18 ☐ 19-24 ☐ 25-30 ☐ Over 30 |
| 96. | To best of your knowledge, what age was the youngest person you sent seminude pictures or videos of yourself | ☐ 8-12 ☐ 13-16 |

| | to? | | ☐ 17-18 ☐ 19-24 ☐ 25-30 ☐ Over 30 |
|--|--|--|---|
| 97. What is the best description of why you sent seminude pictures or videos of yourself? | | | Choose all that apply: Felt pressured to by other people The other person asked for them until I sent them The other person asked for them, and I wanted to send them To make someone angry To make someone jealous To feel sexy To trade for pictures or videos of the other person To start a sexual relationship with the person To upset the other person To get the other person in trouble Other (please specify): |
| 98. | To the best of your knowledge, has anyone you have sent seminude pictures or videos to ever shared it with others without your consent (without you saying it was okay)? | | ☐ Yes ☐ No |
| 99. If yes, how upse was this to you? | | tting/embarrassing | Not upsetting/embarrassing at allA little upsetting/embarrassingVery upsetting/embarrassingExtremely upsetting/embarrassing |
| SENDING "SEXTS" Section 2a Nude 100. In the past six m | | nude "Sexts": For men: completely not testes or just penis For women: completely area onths, how many | s will ask about sending nude "sexts". For the n, the definition of nude "sexts" is below. ude including penis and testes or just penis and y nude or just bare breasts or just visible vaginal |
| nude pictures or videos of yourse men: bare chest showing and/or of wearing a bathing suit or only wea | | showing and/or only | ☐ 1-10 ☐ 11-25 |

| | underwear; <i>of w</i> | omen: wearing only a | <u>26-50</u> |
|------|--|----------------------------|---|
| | bathing suit or o | nly wearing | Over 50 |
| | underwear) have | you sent using your | |
| | cellular phone? | | |
| | SENDING "SEXTS" | The following question | s will ask about sending nude "sexts". For the |
| | Section 2a | purposes of this section | n, the definition of nude "sexts" is below. |
| | <u>Nude</u> | | |
| | | Nude "Sexts": | |
| | ' | For men: completely no | de including penis and testes or just penis and |
| | ľ | testes or just penis | |
| | | For women: completely | y nude or just bare breasts or just visible vaginal |
| | | area | |
| 101. | How many of the nude pictu | ires or videos of | □ 0 |
| | yourself included your face? | | 1-10 |
| | | | 11-25 |
| | | | |
| | | | <u></u> 26-50 |
| | | | Over 50 |
| 102. | How many of these nude pi | | □ o |
| | you engaged in sexual activi | • • | 1-10 |
| | kissing, masturbating or tou | | ☐ 11-25 |
| | genitals/breasts, sexual rubl | oing with a partner, | 26-50 |
| | etc.)? | | |
| 400 | | | Over 50 |
| 103. | How many of the nude pictu | | |
| | yourself were requested by | the people/person | 1-10 |
| | you sent them to? | | <u> </u> |
| | | | 26-50 |
| | | | Over 50 |
| 101 | I I a construction of a continuous | | |
| 104. | How would you describe you | · | Choose all that apply: |
| | the people/person you gene pictures or videos of yourse | | Stranger |
| | pictures of videos of yourse | ii to: | Acquaintance |
| | | | Friend |
| | | | Someone I wanted to be dating |
| | | | |
| | | | Someone I was dating |
| | | | Girlfriend/Boyfriend |
| | | | Person I had an active sexual relationship |
| | | | with |
| | | | Other (please specify): |
| | | | |
| 105. | To best of your knowledge, | what age was the | 8-12 |
| | oldest person you sent nude | | |
| | yourself to? | | ☐ 13-16 |
| | | | |

| 105. | To best of your knowledge, what age was the oldest person you sent nude pictures or videos of yourself to? | ☐ 8-12 ☐ 13-16 ☐ 17-18 ☐ 19-24 ☐ 25-30 ☐ Over 30 |
|------|--|--|
| 106. | To best of your knowledge, what age was the youngest person you sent nude pictures or videos of yourself to? | □ 8-12 □ 13-16 □ 17-18 □ 19-24 □ 25-30 □ Over 30 |
| 107. | What is the best description of why you sent nude pictures or videos of yourself? | Choose all that apply Felt pressured to by other people The other person asked for them until I sent them The other person asked for them, and I wanted to send them To make someone angry To make someone jealous To feel sexy To trade for pictures or videos of the other person To start a sexual relationship with the person To upset the other person To get the other person in trouble Other (please specify): |
| 108. | To the best of your knowledge, has anyone you have sent nude pictures or videos to ever shared it with others without your consent (without you saying it was okay)? | ☐ Yes ☐ No |
| 109. | If yes, how upsetting/embarrassing was this to you? | Not upsetting/embarrassing at all □ A little upsetting/embarrassing □ Very upsetting/embarrassing □ Extremely upsetting/embarrassing □ Not applicable |

| 110. | kind (seminude, nude, picture, video, etc.)? | | • | |
|------|--|--|--|---|
| If | you answei | red "0, I have nev | er sent a "sext" of any ki proceed to the ne | nd (seminude, nude, picture, video, etc.)" please ext section. |
| | Semi-nude wearing underwear | | For men: bare chest showearing underwear | owing and/or only wearing a bathing suit or only nly a bathing suit or only wearing underwear |
| 111. | | seminude pictur (of men: bare ch only wearing a b wearing underw wearing only a b wearing underw using your cellul How many of th videos that you face of the perso | pathing suit or only rear) have you received ar phone? e seminude picture or received included the on? | ☐ 0 ☐ 1-10 ☐ 11-25 ☐ 26-50 ☐ Over 50 ☐ 0 ☐ 1-10 ☐ 11-25 ፫ 26-50 ☐ Over 50 ☐ Over 50 |
| 113. | How many of these seminude pictures or videos showed others engaging in sexual activity (for example: kissing, masturbating or touching your gentials/breasts, sexual rubbing with a partner, etc.)? | | d others engaging in or example: kissing, touching your | ☐ 0 ☐ 1-10 ☐ 11-25 ☐ 26-50 ☐ Over 50 |
| 114. | How many of the seminude pictures or videos that you were received were clearly requested by you? | | were received were | ☐ 0 ☐ 1-10 ☐ 11-25 ☐ 26-50 ☐ Over 50 |
| 115. | 115. If you received any seminude pictures or videos without having requested them please choose the response that | | ut having requested | ☐ Very Upset☐ Upset |

| | best describes how you felt about it: | Neutral Pleased Very pleased Other (please specify): |
|------|--|--|
| 116. | To the best of your knowledge, why did the person send you seminude pictures or videos? | Choose all that apply: They felt pressured to by other people I asked them to, and they wanted to send them I asked them to until they sent the pictures To make me or someone else angry To make me or someone else jealous For sexual reasons To trade me for pictures To start a relationship with me To upset me To get me in trouble Other (please specify): |
| 117. | How would you describe your relationship with the people/person who generally sends you seminude pictures or videos? | Choose all that apply: Stranger Acquaintance Friend Someone I wanted to be dating Girlfriend/Boyfriend Person I had an active sexual relationship with Other (please specify): |
| 118. | To best of your knowledge, what age was the oldest person who has sent you seminude pictures or videos? | ☐ 8-12 ☐ 13-16 ☐ 17-18 ☐ 19-24 ☐ 25-30 ☐ Over 30 |
| 119. | To best of your knowledge, what age was the youngest person who has sent you seminude pictures or videos? | ☐ 8-12 ☐ 13-16 |

| 119. | To best of your knowledge, what age was the youngest person who has sent you seminude pictures or videos? | □ 8-12 □ 13-16 □ 17-18 □ 19-24 □ 25-30 □ Over 30 |
|------|--|---|
| 120. | To the best of your knowledge, how many times have you forwarded seminude pictures or videos of others to people other than the intended recipients? | ☐ 0 ☐ 1-10 ☐ 11-25 ☐ 26-50 ☐ Over 50 |
| 121. | How many people would you say you generally forwarded seminude pictures or videos to, when you do? | ☐ 0 ☐ 1-10 ☐ 11-25 ☐ 26-50 ☐ Over 50 |
| 122. | Who have you forwarded these seminude pictures or videos to? | Choose all that apply: Stranger Acquaintance Friend Someone I wanted to be dating Girlfriend/Boyfriend Person I had an active sexual relationship with Other (please specify): |
| 123. | Choose the best explanation for why you forwarded the seminude pictures or videos: | Please choose all that apply: I thought the other people would want to see I felt pressured to by other people To make someone angry To make someone jealous To trade for pictures or videos of someone else To hurt someone To start a relationship with another person To upset the other person in trouble |

| RECEIVING "SEXTS" | | Nude "Sexts": | | |
|-------------------|----------------------------------|---|---|--|
| Section 2b | | For men: completely n | ude including penis and testes or just penis and | |
| <u>Nude</u> | | testes or just penis | | |
| | | For women: completel | For women: completely nude or just bare breasts or just visible vaginal | |
| | | area | | |
| 124. | 1 | onths how many nude | 0 | |
| | | her person (of men: | 1-10 | |
| | bare chest show | | 11-25 | |
| | _ | ng suit or only wearing | | |
| | | omen: wearing only a | <u>26-50</u> | |
| | bathing suit or o | | Over 50 | |
| | - | e you received using | | |
| DECENTAL | your cellular pho | Nude "Sexts": | | |
| | G "SEXTS" | | ide including penis and testes or just penis and | |
| | on 2b | testes or just penis | ude including penis and testes or just penis and | |
| Nu Nu | <u>ıde</u> | | | |
| | | For women: completely nude or just bare breasts or just visible vagi area | | |
| 125. | How many of the | e nude picture or | По | |
| | videos that you | received included the | ☐ 1-10 | |
| | face of the perso | n? | | |
| | | | 11-25 | |
| | | | 26-50 | |
| | | | Over 50 | |
| 126. | • | ese nude pictures or | □ 0 | |
| | | others engaging in | 1-10 | |
| | | or example: kissing, | 11-25 | |
| | masturbating or | sexual rubbing with a | 26-50 | |
| | _ | | | |
| | partner, etc.)? | | Over 50 | |
| 127. | How many of the nude pictures or | | По | |
| | videos that you | were received were | 1-10 | |
| | clearly requested | d by you? | | |
| | | | 11-25 | |
| | | | <u>26-50</u> | |
| | | | ☐ Over 50 | |
| 128. | If you received a | ny nude pictures or | Very Upset | |
| | videos without | having requested | Upset | |
| | · · | oose the response that | Neutral | |
| | best describes h | ow you felt about it: | | |
| | | | Pleased | |
| | | | Very pleased | |
| | | | Other (please specify): | |
| | | | | |

| 129. | To the best of your knowledge, why did the person send you nude pictures or videos? | Choose all that apply: They felt pressured to by other people I asked them to, and they wanted to send them I asked them to until they sent the pictures To make me or someone else angry To make me or someone else jealous For sexual reasons To trade me for pictures To start a relationship with me To upset me To get me in trouble Other (please specify): |
|------|--|--|
| 130. | How would you describe your relationship with the people/person who generally sends you nude pictures or videos? | Choose all that apply: Stranger Acquaintance Friend Someone I wanted to be dating Girlfriend/Boyfriend Person I had an active sexual relationship with Other (please specify): |
| 131. | To best of your knowledge, what age was the oldest person who has sent you nude pictures or videos? | □ 8-12 □ 13-16 □ 17-18 □ 19-24 □ 25-30 □ Over 30 |
| 132. | To best of your knowledge, what age was the youngest person who has sent you nude pictures or videos? | ☐ 8-12 ☐ 13-16 ☐ 17-18 ☐ 19-24 ☐ 25-30 ☐ Over 30 |

| 133. | To the best of your knowledge, how many times have you forwarded nude pictures or videos of others to people other than the intended recipients? | ☐ 0 ☐ 1-10 ☐ 11-25 ☐ 26-50 ☐ Over 50 |
|------|--|---|
| 134. | How many people would you say you generally forwarded nude pictures or videos to, when you do? | ☐ 0 ☐ 1-10 ☐ 11-25 ☐ 26-50 ☐ Over 50 |
| | | |
| 135. | Who have you forwarded these nude pictures or videos to? | Choose all that apply: Stranger Acquaintance Friend Someone I wanted to be dating Girlfriend/Boyfriend Person I had an active sexual relationship with Other (please specify): |
| 136. | Choose the best explanation for why you forwarded the nude pictures or videos: | ☐ I thought the other people would want to see ☐ I felt pressured to by other people ☐ To make someone angry ☐ To make someone jealous ☐ To trade for pictures or videos of someone else ☐ To hurt someone ☐ To start a relationship with another person ☐ To upset the other person ☐ To get the other person in trouble ☐ Other (please specify): |

SEXTING ____55

| 136. | Choose the best explanation for why you forwarded the nude pictures or | I thought the other people would want to see |
|------|--|--|
| | videos: | ☐ I felt pressured to by other people |
| | | ☐ To make someone angry |
| | | To make someone jealous |
| | | To trade for pictures or videos of someone |

ı

| Sect | Section 3 | | | |
|-------|--|---|--|--|
| In th | In this section you be answering some questions about past rule-breaking and criminal behavior. | | | |
| as h | While answering, remember that all your responses are completely confidential and anonymous so try to be as honest as possible. Though we encourage you to answer all questions, you may skip questions if needed. | | | |
| If yo | ou do not feel that you know the most accurate | answer, take your best guess. | | |
| Plea | se answer regardless of whether the events hap | pened as a juvenile or adult . | | |
| 137 | How many times have you ever been arrested or referred to the court (juvenile, adult, criminal, or civil, etc.)? | ☐ 0 ☐ 1 ☐ 2-5 ☐ More than 5 ☐ Other (please specify): | | |
| 138 | How many times have you been charged with a crime (please limit your responses to criminal charges ; do not include traffic charges, etc.)? | ☐ 0 ☐ 1 ☐ 2-5 ☐ More than 5 ☐ Other (please specify): | | |
| 139 | How many times have you been convicted of a crime? | ☐ 0 ☐ 1 ☐ 2-5 ☐ More than 5 ☐ Other (please specify): | | |

| 140 | If convicted, what were the crimes you were convicted of? | Assault Murder Robbery Arson Burglary Theft Curfew DUI Runaway Vandalism Weapons Substance Related Domestic Violence Other (please specify): | How many times? |
|-----|--|---|---|
| 141 | Altogether, how much time would you estimate you have spent under some sort of law enforcement supervision (juvenile probation, juvenile diversion program, court mandated treatment, adult probation, adult diversion program, etc.)? | None Less than One month One to three Months Four to six months One year More than one year Other (please specify): | |
| 142 | Altogether, how much time have you spent in some sort of incarceration (juvenile detention, jail, prison, etc.)? | None Less than One month One to three Months Four to six months One year More than one year Other (please specify): | |

SEXTING ____58

| 143 | How many times have you been suspended from school? | □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 □ More than 5 □ Other (please specify): |
|-----|---|--|
| 144 | offense (sexual assault, rape, flashing, exposing, peeping, etc.)? | Yes, Once Yes, more than once No Other (please specify): |
| 145 | Have you ever committed a sexual offense that no one found out about? | Yes, Once Yes, more than once No Other (please specify): |
| | If you answered no to both of the ab | pove questions please go to question 149. |
| 146 | What was the offense from the previous question? | Rape Statutory Rape Sexual conduct with a child Other (please specify): |
| 147 | How old was the person against whom you committed the sexual offense? | □ 8-12□ 13-16□ 17-18 |
| | | ☐ 19-24 ☐ 25-30 ☐ Over 30 |

| 149 | Which, if any, of the following drugs have you have you used? | Choose all that apply: Alcohol Marijuana Solvents (gas, paint, things that would be "huffed") Acid/LSD Mushrooms Heroin Pills Meth Ecstasy Cocaine Other (please specify): |
|-----|--|---|
| | | |
| 150 | Which one of the drugs have you used the most? | Alcohol Marijuana Solvents (gas, paint, things that would be "huffed") Acid/LSD Mushrooms Heroin Pills Meth Ecstasy Cocaine Other (please specify): |
| 151 | Approximately how often did you use this drug when you were using it regularly? | ☐ Daily ☐ Weekly ☐ Monthly ☐ A few times a year ☐ Almost never ☐ Other (please specify): |
| 152 | Have you ever stolen from someone/committed a robbery that no one found out about? | Yes, Once Yes, more than once No Other (please specify): |

| | If you answered no to the above question please go to the next section. | | | |
|------------------------------------|--|--|--|--|
| 153 | Who did you steal from (referring to the previous question. | Family Member Friend Acquaintance Stranger Store Other (please specify): | | |
| 154 | What did you steal? | Food Clothing Valuables Money Drugs Other (please specify): | | |
| Please proceed to the next section | | | | |

| Section 4 | | | | |
|--|--|---|--|--|
| In this section you be answering some questions about your history of mental health , as well as some general questions about mental health. | | | | |
| While answering, remember that all your responses are completely confidential and anonymous so try to be as honest as possible. Though we encourage you to answer all questions, you may skip questions if needed. | | | | |
| Some of the questions will ask you to write in answers, some will ask you to choose many from a list, and others will ask you to only choose one. | | | | |
| If you do not feel that you know the most accurate answer, take your best guess. | | | | |
| 155. | Have you ever talked to a psychiatrist, psychologist, therapist, social worker, or counselor about an emotional problem? | Yes No | | |
| 156. | Have you ever felt you needed help with your emotional problems, or have you had people tell you that you should get help for your emotional problems? | Yes No | | |
| 157. | Have you ever been advised to take medication for anxiety, depression, hearing voices, or for any other emotional problem? | ☐ Yes ☐ No | | |
| 158. | Have you ever been seen in a psychiatric emergency room or been hospitalized for psychiatric reasons? | ☐ Yes ☐ No | | |
| 159. | Have you ever heard voices no one else could hear or seen people or things which others could not see? | ☐ Yes ☐ No | | |
| 160. | Did you receive mental health care before you were a teenager (as a child)? | ☐ Yes ☐ No | | |
| 161. | Are you currently receiving mental health care? | ☐ Yes ☐ No | | |
| 162. | How long did you receive mental health care for? | Still currently receiving mental health care For less than one year For a year For more than one year Other (please specify): | | |

I

| 163. | How many times has child protective services ever been called for your safety or protection? | |
|------------------------------------|---|--|
| 164. | How many times have you been removed from your home or parents because of the way you were treated within the home? | |
| Please proceed to the next section | | |

| Section 5 | | | | |
|---|--|---|---|--|
| In this section the focus will be about your opinions and knowledge regarding the legality of sexting. | | | | |
| While answering, remember that all your responses are completely confidential and anonymous so try to be as honest as possible. Though we encourage you to answer all questions, you may skip questions if needed. Some of the questions will ask you to write in answers, some will ask you to choose many from a list, and others will ask you to only choose one. If you do not feel that you know the most accurate answer, take your best guess. | | | | |
| | | | | |
| 165. | Are you aware that sexting is illegal for those under the age of 18? | Yes No | | |
| 166. | When you first began sexting, were you aware that it was illegal? | Yes No | If no, how long after you began "sexting did you find out it was illegal? | |
| 167. | Do you think this behavior <i>should</i> be illegal for those under the age of 18? | Yes No Other (please s | specify): | |
| 168. | What do you think the penalty should be for sexting behavior? | Choose all that app Arrest Diversion Prog Paying a fine Community Se Education (incl Detention Cent Nothing Other (please s | ram rvice uding sex education) ter/Jail | |
| 169. | When a teenager engages in sexting, who should be held responsible? | Parents/primar The teenager Person who red Media School Other (please s | quested the pictures | |

| 170. | What would be the best way to get teenagers to stop engaging in sexting behavior? | ☐ Education for parents/primary caregivers ☐ Education for the teenagers ☐ Punishment for sexting ☐ Not allowing teenagers to have cell phones capable of taking/sending pictures ☐ Other (please specify): | | | |
|---|---|---|--|--|--|
| Please take this space to share any thoughts you have about sexting here: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| The questionnaire is now complete, please submit it. | | | | | |



Referral Information

If you feel the need to discuss anything you read or experienced while participating in this survey further you may contact the investigators Andrew Perkins at abperkin@email.arizona.edu or Emily Mackelprang at emimack@email.arizona.edu. You can also contact the advisor of this project, Judith Becker, Ph.D. at (520) 621-7455 or by email at jvbecker@email.arizona.edu. You will receive a response within 24 hours of contacting an investigator.

If you need immediate psychological assistance please contact:

University of Arizona Campus Health Service Counseling and Psychological Services (520) 621-3334 Highland Commons 1224 E. Lowell St., Tucson, AZ 85721

or

Southern Arizona Mental Health Services 520-622-6000 or 800-796-6762 2502 N. Dodge Boulevard, Suite 190 (Enter on Flower Street) Tucson, AZ 85716