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Perceptions Of Computer-Generated Child Pornography

Beth Catherine Kliethermes

PERCEPTIONS OF COMPUTER-GENERATED CHILD PORNOGRAPHY

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Beth Catherine Kliethermes
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This thesis, submitted by Beth Catherine Kliethermes in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done, and is hereby approved.

Dr. April Bradley, Chairperson

Dr. Karyn Plumm

Dr. Cheryl Terrance

This thesis is being submitted by the appointed advisory committee as having met all of the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

Dr. Wayne Swisher
Dean of the School of Graduate Studies

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Beth Catherine Kliethermes
November 10, 2015

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ABSTRACT

The current study examined public perceptions of computer-generated child pornography (CGCP) and its association with pornographic material acceptance, usage, and sexual interests, as well as attitudes regarding children and sexual activities. Moral Foundations Theory was utilized to interpret these findings from a morality perspective. Additionally, the study explored public perceptions regarding the use of computer-generated child pornography in treatment and its effect on risk of contact offending. Participants included a community sample recruited using Amazon's Mechanical Turk. Results indicated that participants had significantly lower support for illegality of computer-generated child pornography when compared to child pornography; however, support for illegality of computer-generated images was still high. Additionally, participants believed viewing computer-generated child pornography would increase risk for committing a contact offense, and using such images in treatment would be inappropriate and ineffective. Pornography acceptance and usage were negatively associated with higher support for illegality of computer-generated child pornography, while a significant relationship with usage frequency of multiple pornography types was not found. Overall, participants with lower endorsements of cognitive schemas supporting children and sexual activities reported significantly higher support for illegality of computer-generated child pornography. Finally, it was found that support for illegality of computer-generated child pornography had a positive relationship with the

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Ingroup, Authority, and Purity foundations of Moral Foundations Theory. Implications for public policy and clinical practice are discussed.

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INTRODUCTION

Perceptions of Computer-Generated Child Pornography

Sexual offending behaviors, particularly child pornography offenses, have been the focus of increased societal concern and federal policy decision-making (Mears, Mancini, Gertz, & Bratton, 2008). Despite a lack of research concerning the role of pornography and sexual offending, policy makers have become more aggressive in their policies towards child pornography offenders. Understanding child pornography must be put in the context of public opinion about sex crimes and related policies (Mears et al., 2008). A better understanding of public opinions related to child pornography and child pornography offenders may help to shed light on how laws should be shaped, as well as how to develop successful interventions and prevention programs for adults with sexual interest in children.

Pornography Laws and Definitions

Offenses related to child pornography[1] represent the largest proportion of federal sexual exploitation cases in the United States (Motivans & Kyckelhan, 2007). Accordingthe U.S. Department of Justice-Federal Bureau of Investigations Uniform

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[1] Although the term "child sexual abuse images (CSAI)" more accurately reflects the nature of image content, child pornography is used in this paper because it is the term used in federal laws.

Crime Report's publication *Crime in the United States*, there were 6,026 "pornography/obscene material" offenses in 2012. The offenses involved 6,031 victims and 5,962 known offenders (United States Department of Justice, 2012).

The definition of child pornography is complicated by the fact it varies from country to country and state to state. Therefore, this discussion will focus on federal child pornography legislation in the United States. The first federal law that specifically addressed child pornography was the Protection of Children Against Sexual Exploitation Act of 1978, prohibiting the manufacturing and distributing of "obscene" material of individuals under the age of 16 years. In 1984, the law regarding the definition of a minor was changed to anyone younger than the age of 18 years. The Child Pornography Prevention Act of 1996 passed by Congress amended the child pornography definition to also include any visual depiction that "appears to be of a minor engaging in sexually explicit conduct." This was an attempt to regulate virtual child pornography, both images that were morphed or digitally created [18 U.S.C. §§ 2252A-2256(8)]. The Supreme Court ruled that the Act was unconstitutional in 2002 (*Ashcroft v. Free Speech Coalition*, 2002), and the law has been amended. In response to the *Ashcroft* decision, the Prosecutorial Remedies and Other Tools to End the Exploitation of Children Today (PROTECT) Act of 2003 criminalized any kind of visual depiction, such as a "drawing, cartoon, sculpture or painting" that "depicts a minor engaging in sexually explicit conduct and is obscene" or "depicts an image that is, or appears to be, of a minor engaging in ... sexual intercourse ... and lacks serious literary, artistic, political, or scientific value" (18 U.S.C. § 1466A). By its own language, the law does not make all computer-generated

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child pornography illegal, just those depictions found to be "obscene" or lacking "serious" value (Wortley & Smallbone, 2006).

The issue of whether or not to consider computer-generated child pornography illegal is heated because of concerns that viewing such images will ultimately lead to a contact sexual offense against a child. Currently, federal law defines child pornography as "any visual depiction, including any photograph, film, video, picture, or computer or computer-generated image or picture… of sexually explicit conduct" that involves a "minor [under 18 years of age] engaging in sexually explicit conduct" or that is "indistinguishable" from a minor (18 U.S.C. § 2252). It is noteworthy to add that obscene fictional depictions of someone appearing under 18 years of age can be legal if such depictions have "literary, artistic, political or scientific value;" however, there are no legal standards that specifically address what criteria are necessary for such images to have value. Finally, federal law outlines that it is illegal under federal law to view child pornography even if an image is not actively downloaded or saved (Seto, 2013).

Pedophilic Disorder

In the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; American Psychiatric Association [APA], 2013), pedophilic disorder is defined by three diagnostic criteria. First, an individual has experienced "recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving sexual activity with a prepubescent child or children (generally age 13 years or younger)" for a period of at least six months. Secondly, the individual has "acted on these sexual urges, or the sexual urges or fantasies cause marked distress or interpersonal difficulty." Finally, the

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individual must be at least 16 years old and must be at least five years older than the child(ren) referred to in the first criterion (APA, 2013).

The prevalence of adult sexual interest in children (ASIC) among the general public is unknown, considering the social stigma surrounding pedophilic disorder and concern regarding the involvement of law enforcement. Therefore, the majority of research in this area has been limited to forensic populations (Seto, 2008). According to the *DSM-5*, the prevalence of pedophilic disorder is approximately 3-5% (APA, 2013).

Some research has been conducted to examine ASIC in nonclinical and nonforensic samples. For example, an early study by Briere and Runtz (1989) surveyed a sample of 193 college undergraduate men. Survey results revealed that 9% reported having sexual fantasies involving children, and 5% endorsed having masturbated to such fantasies. Furthermore, 21% of men in the sample reported sexual attraction to children at varying levels. In the event they could avoid detection and punishment, 7% of the sample endorsed some degree of likelihood that they would have sex with a child (Briere & Runtz, 1989). However, the researchers did not collect data on the age(s) of the children, nor participants' pornography use and interest in child pornography. A recent community-based sample study was conducted by Ahlers and colleagues (2011), examining the prevalence of sexual fantasies. Within their sample of 367 German men aged 40 to 79 years old, 10.4% reported having had fantasies involving pedophilia (Ahlers et al., 2011). Unfortunately, no recent studies utilizing community samples have been conducted in the United States.

A recent study by Dawson, Bannerman, and Lalumiére (2014) utilized an online survey to examine paraphilic interests, including pedophilic disorder, in a Canadian

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nonclinical sample. Within their sample of 305 men and 710 women, sexual arousal to prepubescent children (i.e., "below the age of 12") was endorsed by 0.6% of men; however, no women reported any arousal to prepubescent children. Dawson and colleagues (2014) found that 0.9% of men and 0.1% of women endorsed sexual arousal to pubescent children, defined in their measure as age 12-14. Overall, the average self-reported aversion/arousal ratings for having sex with prepubescent and pubescent children were in the "very repulsive" category for both genders. Although their study did include a large number of participants, the sample was homogenous, comprised mainly of Caucasian (88%) university students (75% of men and 88% of women). Further, the study assessed for sexual interest in children solely within the context of contact sexual activities [e.g., "You are having sex with a boy (age 12-14)"; Dawson et al., 2014]. All in all, differences between measures utilized by various researchers may account for discrepancies, as well as less representative samples.

Pornography Consumption and Acceptability

The availability of pornography has largely been facilitated by widespread access to the Internet. Cooper (1998) described this as the "Triple-A Engine" effect, that the accessibility, affordability, and anonymity provided by the internet has increased internet-users' ability to engage in pornography consumption. Exact figures for the consumption of pornographic material are difficult to ascertain. One of the most recent reports estimated that approximately 40 million adults in the United States regularly visit Internet pornography sites. The pornography industry has been estimated to generate annually $100 billion dollars worldwide with the United States generating over $13 billion in

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revenue (Ropelato, 2007). Moreover, 12% of websites contain pornographic content, which is approximately 4.2 million websites worldwide (Rosser et al., 2012).

The subject of pornography is controversial with proponents claiming using sexual material can enhance sexuality or sex lives by providing a safe recreational outlet, while opponents argue that pornography use decreases the quality of relationships and encourages sexual aggression. However, research support is lacking on both sides. According to a comprehensive literature review conducted by Hald, Seaman, and Linz (2014), pornography consumption rates are estimated at 50 to 99% among men and 30 to 86% among women based on several international studies. In the U.S., pornography use in the general public has been examined by only a small number of studies.

One study examined pornography acceptance and use across six universities in the United States, and included 813 college students aged 18 to 26 years. Results indicated that 67% of men and 49% of women agreed that viewing pornography is acceptable. They reported that 87% of men and 31% of women endorsed using pornography (Carroll et al., 2008). The finding that 20% of men view pornography despite believing it to be an unacceptable behavior suggests that there is a portion of men that experience cognitive dissonance as a result of pornography consumption.

Although the majority of individuals who engage in pornography-related activities do not encounter any negative consequences, pathological pornography consumers are far more likely to experience negative consequences (e.g., depression, anxiety, relationship difficulties) that result from their maladaptive pornography consuming behavior (Cooper, Delmonico, & Burg, 2000; Twohig, Crosby, & Cox, 2009). Currently, the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*;

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American Psychiatric Association [APA], 2013) does not recognize problematic pornography use as a mental illness. Furthermore, preoccupation with pornography appears to have similarities to the proposed criteria for hypersexual disorder. However, this is currently not a recognized disorder in the *DSM-5*. "Problematic internet use" was first used by Quayle and Taylor (2003) to describe the model of pornography consumption or pornography addiction as a mental illness. Bensimon's (2007) description of the addiction phases in pornography use illustrates the similarities to both substance dependence and impulse control disorders as described in the *DSM-5*. Similarly, Young (2008) described addiction to Internet pornography as following a cycle of discovery, experimentation, escalation, compulsion, and hopelessness. Although presented differently, these proposed models of online sexual addiction include similar concepts of behavior escalation and inability to stop the behavior, which are consistent with present theories of behavioral addictions.

Pornography Consumption and Morality

Examining pornography in the framework of morality creates an issue that is complex and controversial. Currently, the majority of research in this area has focused on morality in the context of religiosity.

Pornography in the context of religiosity. Research has demonstrated that high religiosity are generally found to be negatively correlated with pornography usage and acceptability, though some studies have found that some individuals consume pornography despite believing it is unacceptable. Carroll and colleagues (2008) found that religiosity was negatively correlated with pornography acceptance among men and women. However, they identified a weaker correlation between internet pornography use

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www.manaraa.com

and religiosity, suggesting that many religious individuals use pornography even though they find it unacceptable. Abell and colleagues' (2006) study of 120 university men found religiosity and spirituality were negatively correlated with general sexual addiction. However, this correlation was not observed between religiosity and online pornography use (Abell et al., 2006). Goodson, McCormick, and Evans (2000) found that religiosity was significantly correlated with negative feelings and a lack of pleasure when viewing online pornography.

Nelson, Padilla-Walker, and Carroll (2010) studied 192 adult men attending a religious university. Even though 100% of the participants endorsed believing pornography was unacceptable, 35 % reported using pornography. When compared to pornography consuming participants, participants who did not consume pornography reported higher levels of religious practices, higher quality family relationships, higher levels of self-worth and identity, and lower depression levels (Nelson et al., 2010). Based upon the available research, one would expect high levels of religiosity to be a protective factor for adults with sexual interest in children from viewing child pornography.

These findings about religiosity and relationships with acceptance and consumption of pornography do not represent the relationship between morality and pornography. However, research examining morality and pornography independent of the context of religiosity is lacking. Based on the assumption that an individual's behavior is governed by an internal sense of right and wrong, moral reasoning is linked to behavior and represents a broader domain than religious values. Also, religious values are culturally specific. To address these issues, examining the relationship between morality and pornography consumption would be a significant contribution to the field.

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Moral theories. The use of cognitive-developmental theory has been useful in conceptualizing behavior based on the structure and process of moral reasoning rather than moral beliefs. Kohlberg conceptualized moral development as six sequential hierarchical stages of moral judgment. The six stages were separated into three levels of reasoning: pre-conventional, conventional, and post-conventional (Kohlberg, 1969, 1984). The pre-conventional reasoning level includes Stage 1, in which reasoning is based on obedience of authority and avoidance of punishment, and Stage 2, in which reasoning is egocentric (i.e., focused on balancing rewards and punishment). At the conventional reasoning level, Kohlberg posited that individuals' moral reasoning becomes more focused on considering the needs of others, making decisions that will benefit their interpersonal relationships (Stage 3) and maintain societal rules and conventions (Stage 4). The post-conventional reasoning level (Stages 5 and 6) represents forms of meta-ethical judgment. In Stage 5, individuals develop an understanding of the contractual nature of society's laws and that, in some cases, these rules can be broken. Moral reasoning in Stage 6 is governed by consistent ethical principles that can override societal laws if they are conflicting (Kohlberg, 1969, 1984). Overall, these stages were concerned with morality in terms of justice.

Beyond the early leading theories in moral psychology, cross-disciplinary studies in human morality have identified that morality is much broader than the identified individual-centered morality of justice (Kohlberg, 1969, 1984) and care foundations (Gilligan, 1982), for example. Due to several criticisms of these early theories and cultural variances, Haidt and Joseph (2004) reviewed cross-disciplinary research to identify five psychological foundations that develop moral intuitions across cultures,

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culminating in Moral Foundations Theory (MFT). In addition to being a cultural-psychological theory, it is a nativist theory and does not depend upon a particular modularity in order to be true (Haidt & Graham, 2007).

Further work by Haidt and Graham (2007) expanded upon Moral Foundations Theory and developed the current moral foundations: harm/care, fairness/reciprocity, ingroup/loyalty, authority/respect, and purity/sanctity. The harm/care foundation included moral concerns regarding nurturance, compassion, and understanding. The fairness/reciprocity foundation involved concerns of justice, rights, and equal exchange. The ingroup/loyalty foundation represented concerns of faithfulness to one's group and patriotism. The authority/respect foundation encompassed concerns regarding social order hierarchies, including respecting and maintaining such orders. The purity/sanctity foundation included concerns about respecting the human body and not living as if ruled by carnal passions (Graham et al., 2011).

The relationship between criminal offending and moral reasoning has been well established by researchers, specifically offenders exhibit reasoning at lower levels compared to non-offender comparison groups (Palmer, 2003). However, the vast majority of this research has utilized samples consisting of adolescents and young adults (Gibbs, Basinger, Grime, & Snarey, 2007). Therefore, it is uncertain if similar patterns would be found with adult offenders or child pornography offenders. Further, the majority of morality research in this area has incorporated a cognitive-developmental theory of moral reasoning (Gibbs et al., 2007), and no studies have examined sexual offending incorporating Moral Foundations Theory. Therefore, a study examining pornography and attitudes about pornography, including related sexual offenses (i.e., child pornography

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and computer-generated child pornography offenses), utilizing Moral Foundations Theory would be a contribution to the field.

Attitudes toward Child Pornography and Related Laws

Limited research has been conducted examining public attitudes towards child pornography, computer-generated child pornography, and related laws. McCabe (2000) surveyed 261 community members to evaluate U.S. citizens' knowledge of and attitudes toward child pornography laws. Data analysis revealed that 92.3% of respondents were aware that possession of sexual material involving a minor was illegal and 95.4% knew that distribution/transmission of child pornography was illegal. For distribution/transmission, McCabe found a significant difference for gender with more males perceiving this activity as legal. However, almost a third (32.2%) of survey participants thought that downloading child pornography from an online newsgroup was legal. Further, 92.3% of respondents felt that it was acceptable to view computer-generated children in sexual material, which is equivalent to the percentage who knew that possession of sexual material involving a minor was illegal. An interesting finding was that at the time of the study, viewing computer-generated children was illegal, and 92.3% of respondents still endorsed it as an acceptable activity (McCabe, 2000). Overall, these findings were the first to examine knowledge of child pornography laws and public attitudes towards computer-generated child pornography; however, additional research is needed to determine if individuals feel computer-generated child pornography should be legal or illegal.

To study perceptions of the offense of child pornography possession, Lam, Mitchell, and Seto (2010) examined how age and gender of offender and depicted minor

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influenced perceptions of the offense among Canadian university students. Participants rated the possession offense as more severe if the depicted minor was younger, regardless of the minor's gender. Furthermore, participants' perceptions of offense severity were not affected by the offender's age and gender. However, the authors found that male offenders were perceived to be at higher risk for a future child pornography offense. Offenses were rated as more severe if the participants thought the offender was a pedophile (Lam et al., 2010). Additional research is needed to determine if Lam and colleagues' (2010) results are generalizable to the U.S. adult population.

A national telephone survey of 425 American men and women found that 89% of those surveyed support terms of incarceration for individuals convicted of distributing child pornography, and 68% supported incarceration for individuals convicted of accessing child pornography (Mears et al., 2008). A limitation of Mears and colleagues' (2008) findings is that they utilized a telephone survey. Further, the survey did not explore attitudes regarding the treatment of these offenders. Additionally, research examining such areas in the context of computer-generated child pornography has not been published.

At this time, research in this field is lacking, and current findings are mixed. Overall, there appears to be a lack of clarity regarding pornography laws, and pornography acceptance levels are inconsistent.

Child Pornography and Contact Offending

In addition to the fact that child pornography perpetuates the cycle of child sexual abuse, a public concern about the possession and viewing of child pornography is that these individuals have committed or will commit a contact sexual offense in the future.

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Similar concerns have been discussed in regard to computer-generated child pornography. One proposed reason for this is the assumption that individuals who consuming child pornography or computer-generated child pornography have pedophilic disorder. Seto, Cantor, and Blanchard (2006) concluded that possession of child pornography was a valid diagnostic indicator of pedophilic sexual interests, based on sexual arousal responses assessed by phallometric testing. Given these findings, an interest area for research is assessing risk, specifically risk of engaging in a contact offense. In an effort to study if child pornography offenders later commit contact sexual offenses, Seto and Eke (2005) examined the criminal records of 201 adult male child pornography offenders utilizing police databases. After reviewing their prior criminal records to identify potential predictors of subsequent offending, the authors monitored the databases for charges and convictions after the index child pornography offense(s). After a 30-month follow-up period, 17% of the sample had offended again in some way. The child pornography recidivism rate (i.e., individuals whose new offense was a child pornography offense) for this sample was 6%, and 4% were charged with a new contact sexual offense. Criminal history was found to be a significant factor in reoffense. Compared to those without a prior criminal record, child pornography offenders with prior criminal records were significantly more likely to offend again, either generally or sexually. Furthermore, they found that child pornography offenders with a prior or concurrent contact sexual offense were the most likely to offend again in any way (Seto & Eke, 2005).

A recent meta-analysis by Seto, Hanson, and Babchishin (2011) assessed the risk of child pornography offenders crossing-over to contact sexual offending. The analysis

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included a combined sample of 2,630 online sexual offenders. Results showed that 3.4% of online offenders reoffended with another child pornography offense. Furthermore, 2% of online offenders reoffended with a contact sexual offense. Overall, this research suggests that most child pornography offenders present as low risk, allowing for clinicians to focus treatment on offenders with a high risk to commit a contact offense (Seto et al., 2011).

Interestingly, even though data does not support that non-contact offenders (e.g., child pornography offenders) will become contact offenders, public attitudes have not supported these findings. While these studies shed some light on child pornography offenders and contact offenses, they do not provide information on whether or not pornography use affected risk.

Pornography and Cognitive Distortions

Research within sexual offending has built upon terminology introduced by Aaron Beck's reference to dysfunctional thoughts in his cognitive therapy model. Abel et al. (1989) applied cognitive distortions to contact sexual offenders, defining cognitive distortions as "justifications, perceptions and judgments used by the sex offender to rationalize his child molestation behavior" (p. 137). Early work by both researchers and clinicians observed and explored the role of distorted thinking patterns and maladaptive beliefs in the facilitation and justification of sexual offending (e.g., Abel, Becker, & Cunningham-Rathner, 1984; Ward, Hudson, Johnson, & Marshall, 1997). Many attempts failed to produce an integrated theory of sexual offending, specifically that they did not explain both the onset of initial offending and subsequent offenses (Ward & Hudson, 1998). Ward and Keenan (1999) posited that there are five cognitive distortions that

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together accounted for most offense-specific cognitive distortions observed in sexual offenders and described them as implicit theories. The implicit theories are referred to as children as sexual beings, uncontrollability, entitlement, nature of harm, and dangerous world. The nature of harm implicit theory included two specific concerns: levels of harm and sex is beneficial. The dangerous world implicit theory included two types of beliefs: the world is hostile and children are reliable (Ward & Keenan, 1999).

Published cognitive distortion scales based on research on the role of distorted thinking in sexual offending has given rise to a number of measurement instruments. These have included the Abel and Becker Cognition Scale (ABCS; Abel et al., 1984), the MOLEST (Bumby, 1996), and the Hanson Sex Attitude Questionnaire (Hanson, Gizzarelli, & Scott, 1994). However, these scales assumed contact offending and had not been used with child pornography offenders until recently. Howitt and Sheldon (2007) developed the Children and Sexual Activities Inventory (C&SA) from existing cognitive distortion scales to investigate the applicability Ward and Keenan's (1999) implicit theory among internet sex offenders with no contact offenses, including child pornography offenders. Even though they found little support for Ward and Keenan's five implicit theories, internet-only offenders were significantly more likely than contact offenders to endorse items concerning children's ability and willingness to consent to sexual activity with adults (i.e., the children as sexual beings implicit theory; Howitt & Sheldon, 2007).

Items from the C&SA inventory have been used in additional research (Merdian, Curtis, Thakker, Wilson, & Boer, 2014); however, additional studies are needed to establish the scale's validity, and it is still is exploratory. Further, Howitt and Sheldon

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(2007) and Merdian et al. (2014) did not include a nonclinical or nonforensic comparison sample. Therefore, the level of endorsement of such cognitive distortion-related statements proposed to assess cognitive distortions among non-contact offenses (e.g., child pornography offenses) is not known.

Purpose of the Present Study

The current study examined public perceptions of computer-generated child pornography and its association with pornographic material acceptance, usage, and sexual interests, as well as attitudes regarding children and sexual activities. Moral Foundations Theory was utilized in order to interpret these findings from a morality perspective. Additionally, the study explored public perceptions regarding the use of computer-generated child pornography in treatment and its effect on risk of contact offending. These are largely understudied areas, and, therefore, this study was primarily exploratory. One goal of the current study was to explore attitudes toward computer-generated child pornography. It was hypothesized that there would be little support for the use of computer-generated child pornography, and most participants would agree with the illegality of such material. In particular, it was hypothesized that support for illegality of simulated material would likely have a negative relationship with acceptance and usage of pornography. Previous research studies have utilized different measures to obtain this information, and this study used one author-constructed measure and one measure adapted from Carroll et al. (2008). The author-constructed measure was also utilized to compare agreement with illegality of child pornography and computer-generated child pornography, across specific age ranges. A second goal of the study was to examine whether or not support for illegality of simulated material varied as a function of sexual

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interests. It was hypothesized that agreement with illegality of simulated material would have a negative relationship with wider sexual interests. This was accessed by exploring the relationship between usage frequency of different types of sexually explicit material and a score of agreement with illegality of computer-generated material depicting individuals appearing to be under the age of 18 years. There are no published, widely utilized measures with psychometric properties to explore these areas; therefore, this study used an author-constructed questionnaire. A third goal was to examine the relationship between agreement with illegality of simulated material and attitudes about children and sexual activities that have been proposed to represent cognitive distortions among child pornography offenders. It was hypothesized that more accepting attitudes about children and sexual activities, measured by Howitt and Sheldon (2007)'s Children and Sexual Activities Inventory (C&SA), would have a negative relationship with support for illegality of computer-generated child pornography. A fourth goal of the current study was to examine if support for illegality of simulated images would have a relationship with the five foundations of Moral Foundations Theory, measured by the Moral Foundations Questionnaire (Graham et al., 2011). Exploratory comparisons were also performed to examine public perceptions regarding the use of computer-generated child pornography in treatment for adults with sexual interest in children and its effect on risk contact offending.

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CHAPTER II

METHOD

Participants

A priori power analysis indicated a total sample size of only 125 participants would be required for this study. Therefore, 200 participants were recruited to participate in the study to compensate for missing and incomplete data. Individuals were eligible for the study if they had a minimum age of 18 years and were a resident of the United States. Participants were recruited through Amazon's Mechanical Turk, an online research management tool.

Two hundred individuals completed or partially completed the study. Six individuals were excluded from the analyses due to missing data. Two individuals did not identify as male or female and were also excluded from the analyses. Participants who indicated that they worked with either sexual offenders ($n = 3$) or victims of sexual crimes ($n = 5$) were removed from the analysis to reduce the possibility of biased responding. Scores on the Marlowe Crowne Social Desirability Scale (MCSDS) were used to remove participants who answered in an overly positive or socially desirable way ($n = 48$; Crowne & Marlowe, 1960). Responses from the remaining participants (N = 136) were utilized for further analysis.

Of the final 136 participants, the sample consisted of 77 men (56.62%) and 59 women (43.38%). Participants ranged in age from 18 to 66 years ($M = 34.56$, $SD =$

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11.66). The race/ethnicity of the participants was reported as 71.32% Caucasian/European American, 8.09% Hispanic/Latino(a), 7.35% Black/African American, 5.15% Asian/Pacific Islander American, 2.21% Middle Eastern/Arab American, and 5.88% Other or multiracial/multiethnic. Education levels were reported as follows: 0.74% less than High School, 8.82% High School/GED, 31.62% some college, 9.56% Associates Degree, 36.03% Bachelor's Degree, 8.09% Master's Degree, 0.74% Doctoral Degree, and 4.41% professional degree (e.g., J.D., M.D.). A full description of the sample's characteristics is presented in Table 1.

Materials

Demographic questionnaire. A demographic questionnaire (see Appendix A), created by the author, asked participants about age, gender, race/ethnicity, sexual orientation, relationship status, household, socioeconomic status, education level, employment status, occupation, political orientation, and religiosity. Participants were also asked if their occupation involved working with sexual offenders or victims of sexual offenses. Participants were asked about their history of criminal activity, if they had ever known someone accused, charged, or convicted of a sexual offense, and if they anyone who has been on the sexual offender registry. Finally, participants were asked if they had been the victim of a sexual offense or had known anyone who has been the victim of a sexual offense.

Pornography acceptance and usage questionnaire. This questionnaire, similar to that utilized by Carroll et al. (2008), was created by the authors. It utilized two questions to examine the acceptance and usage of pornographic material (see Appendix B). To measure acceptance of pornography, participants were asked how much they agree

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with the statement, "Viewing or reading pornographic material (such as magazines, movies, and/or Internet sites) is an acceptable activity." Participants were asked to rate their responses on a 7-point scale ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). To measure pornography usage, participants were asked the question, "During the past 12 months, on average, how many days per month did you view pornographic material (such as magazines, movies, and/or Internet sites)?" Responses to this item were recorded on an interval scale (0 to 30). These questions were analyzed separately as "Pornography Acceptance" and "Pornography Usage," respectively.

Sexual material usage questionnaire. The participants' sexual material usage was measured using a series of questions created by the authors (see Appendix C). This information was used to obtain a better understanding of the type and frequency of sexually explicit material (SEM) utilized by the participants. Prior to beginning the questionnaire, participants were provided with the following definition of sexually explicit material: "Sexually explicit material is defined as any material that infers or portrays sexuality, sexual interest, or sexual activity." The participants were asked to indicate if they have ever seen or read types of sexually explicit material that contained 14 themes: oral sex, vaginal sex, anal sex, men together, women together, a man with multiple women, a woman with multiple men, bondage, sado-masochism, fecal matter or urine, rape/forced sex, children, "barely legal," and sexual activity with animals. Responses to these items were "yes" or "no." If participants indicated "yes" to having seen or read a specific type of sexual material, they were then asked to rate how arousing they found that type of sexually explicit material on a scale ranging from 1 (*not at all arousing*) to 7 (*very arousing*). Next, participants were asked to indicate how often they

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view the specific type of sexual material. Responses to these items were measured on a 5-point scale with the responses ranging from 1 to 5 (1 = *never*, 2= *less than once a month*, 3 = *1-3 times a month*, 4 = *1 or more times a week*, 5 = *daily*). Item responses were collapsed into two simple summation scores, one for total exposure to pornography types and one for total pornography use. For the first summation (titled the "SEM Type Exposure" scale), scores ranged from 0 (none or low) to 14 (high exposure to multiple types of pornography). Higher scores indicated more exposure to different types of pornography. For the second summation (titled the "SEM Type Usage scale"), scores ranged from 14 (never) to 70 (daily consumption of multiple types of pornography). Higher scores indicated a higher consumption frequency of multiple types of pornography. The internal consistency reliability was $\alpha = .86$.

Attitudes towards computer-generated child pornography questionnaires.
Evaluation of participants' perceptions and attitudes towards child pornography, computer-generated child pornography, and related laws were measured utilizing two different questionnaires.

Support for illegality. The participants' attitudes regarding the legality of computer-generated child pornography was measured using an adaptation and expansion of McCabe's survey (2000). This 48-item questionnaire consisted of statements including four actions (i.e., distribution/transmission, creating/manufacturing, downloading/possessing, and accessing/viewing without downloading) regarding four types of images (i.e., pictures/videos with nudity, pictures/videos of sexual acts, computer-generated pictures/videos or drawings with nudity, and computer-generated pictures/videos or drawings of sexual acts) for three age ranges (i.e., 7 years old or

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younger, 8 to 12 years old, 13 to 17 years old; see Appendix C). Prior to beginning the questionnaire, participants were provided with a definition of computer-generated images: "Computer-generated pictures/videos are defined as virtual images that do not involve real people." Participants were asked to rate their level of agreement with the illegality of each statement on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). These items were collapsed into two simple summation scores that were calculated for each age range, one by adding the responses for the pictures/videos with nudity and pictures/videos of sexual acts items [Child Pornography (CP) subscales], and the second by summing the responses for the computer-generated pictures/videos or drawings with nudity and computer-generated pictures/videos or drawings of sexual acts items [Computer-generated Child Pornography (CGCP) subscales]. This generated six subscale scores, two for each of the three age ranges. The scores ranged from 8 to 56. Higher subscale scores indicated higher agreement that the actions involving the use of child pornography and computer-generated sexual images of children should be illegal, and lower scores indicated less agreement the actions should be illegal. The internal consistency reliabilities for these subscales were excellent (CP age 7 or younger subscale $\alpha = .95$, CP age 8 to 12 subscale $\alpha = .95$, CP age 13 to 17 subscale $\alpha = .98$, CGCP age 7 or younger subscale $\alpha = .98$, CGCP age 8 to 12 subscale $\alpha = .99$, CGCP age 13 to 17 subscale $\alpha = .99$).

These scores were further collapsed into two simple summation scale scores that were calculated to include all ages: one by adding the responses for the pictures/videos with nudity and pictures/videos of sexual acts items [titled the "Child Pornography (CP)" scale], and the second by summing the responses for the computer-generated

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pictures/videos or drawings with nudity and computer-generated pictures/videos or drawings of sexual acts items [titled the "Computer-generated Child Pornography (CGCP)" scale]. The scale scores ranged from 24 to 168. Higher scores indicated higher agreement with the actions involving the use of child pornography and computer-generated sexual images of children should be illegal, and lower scores indicated less agreement with the actions should be illegal. The internal consistency reliability was α = .98 for the perceptions of the child pornography legality score (CP scale) and α = .99 for the computer-generated sexual images of children legality score (CGCP scale).

Treatment utility and offending risk. Next, participants' perceptions regarding the use of computer-generated children in sexual material, its utility in treatment for adults with sexual interest in children (ASIC), and its effect on risk of contact offending were measured by 14 items created by the authors, consisting of seven statements for two age ranges (see Appendix E). Item responses were scored on a 7-point response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). After reversing several item endorsements for scoring purposes (items 2, 5, 6, 7, 9, 12, 13, 14), the item responses were collapsed into two simple summation scores, one for utility in treatment and one for risk of contact offending. The Treatment Utility scale scores ranged from 4 to 28 with higher scores indicating a higher degree of disapproval for the use of computer-generated sexual images of children in therapy for ASIC. The reliability of this scale was α = .97. The Offense Risk scale scores ranged from 10 to 70 with higher scores indicating stronger agreement that viewing computer-generated sexual images of children would increase a person's risk for contact offending. The reliability of this scale was α = .92.

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Children and Sexual Activities Inventory (C&SA). Another measurement tool used in this study to capture participants' attitudes regarding children and sexual activities was adopted from Howitt and Sheldon (2007). This inventory included 39-items, which yielded a total score (see Appendix F). Although Howitt and Sheldon (2007)'s original scale was based on a 4-point response scale, the scale was expanded to a 7-point scale due to concerns about ceiling and floor effects. Also, wording of several items was changed to gender-neutral terms (e.g., man was replaced with adult. Item responses were scored on a 7-point response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Several item endorsements (items 2, 16, and 26) were reversed for scoring purposes. The scores ranged from 39 to 273, with higher scores reflecting more agreement with cognitive schemas. The C&SA score was obtained by summing the scores for the items (reversing score responses as appropriate). The reliability of this scale was α = .93.

Moral Foundations Questionnaire (MFQ). Participants were asked to complete Graham et al.'s (2011) 30-item questionnaire that is comprised of five subscales (see Appendix G). This questionnaire measured the extent to which participants believe that five different concerns are relevant for moral judgment. The measure had two sections, moral relevance and moral judgment. The first 15 items constituted the moral relevance section and measured how relevant various factors are to participants when making decisions involving whether something is right or wrong. Participants were asked to consider the following question for each item: "When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?" Item responses were scored on a 6-point response scale ranging from 0 to 5 (0

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= *not at all relevant*, 1 = *not very relevant*, 2 = *slightly relevant*, 3 = *somewhat relevant*, 4 = *very relevant*, 5 = *extremely relevant*). The second 15 questions, comprising the moral judgment section, were more situational and concrete items. Participants were asked to indicate their level of agreement or disagreement with each item. These item responses were scored on a 6-point response scale ranging from 0 to 5 (0 = *strongly disagree*, 1 = *moderately disagree*, 2 = *slightly disagree*, 3 = *slightly agree*, 4 = *moderately agree*, 5 = *strongly agree*). In addition to these 30 items, two "catch" questions were included to identify participants' level of responsiveness, one in each section of the questionnaire. The questionnaire yielded five scale scores: Harm, Fairness, Ingroup, Authority, and Purity. Each scale score was obtained by summing the response rating to the three respective items from the Moral Relevance section and the three respective items from the Moral Judgment section. This measure has been used in previous research and has established validity and reliability (e.g., α = .69 [Harm], α = .65 [Fairness], α = .71 [Ingroup], α = .74 [Authority], and α = .84 [Purity]; Graham et al., 2011). In the present study, internal consistency reliabilities were acceptable (α = .75 [Harm], α = .70 [Fairness], α = .78 [Ingroup], α = .77 [Authority], and α = .84 [Purity]).

Marlowe-Crowne Social Desirability Scale (MCSDS). Participants' tendency for socially desirable responding was assessed using the Marlowe-Crowne Social Desirability Scale (MCSDS) developed by Crowne and Marlowe (1960). This instrument was included as a validity check. The MCSDS consisted of 33 true-false items that describe specific behaviors, some of which are acceptable but improbable and others that are unacceptable but probable (see Appendix H). Although several shortened versions have been produced by factor analysis (e.g., Reynolds, 1982; Strahan & Gerbasi, 1972),

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none of them have consistently been identified as superior, and the full-scale MCSDS has remained the most frequently used instrument to measure social desirability in clinical and research settings. Participants were asked to read each statement concerning personal attitudes and traits and indicate if the statement is true or false for them. The scale yielded a total score that ranges from 0 to 33, with higher scores indicating higher social desirability. The MCSDS was included in this study as a validity check, and participants scoring greater than or equal to 20 were excluded from the final analyses (Crowne & Marlowe, 1960). This measure has been used in previous research and has established validity and reliability with Cronbach's alpha scores ranging from .72 to .88 (e.g., Crowne & Marlowe, 1960; Loo & Thorpe, 2000).

Procedure

Participants were recruited through Amazon's Mechanical Turk and were limited to individuals with a minimum age of 18 years that resided in the United States. An advertisement for the study was placed on Amazon's Mechanical Turk (Appendix J). Participants were redirected to Qualtrics, an online survey system, where they completed the study electronically in exchange for a small financial incentive. Initially, participants read the instructions and agreed to participate in the study by reading an agreement statement and clicking the link to the study (Appendix I). After obtaining informed consent, participants were given a series of questionnaires, including measures of pornography acceptance and usage (Appendix B), sexual material usage (Appendix C), and attitudes towards computer-generated child pornography (Appendix D and E). Participants were also asked to complete the Children and Sexual Activities Inventory (Appendix F) and the Moral Foundations Questionnaire (Appendix G). To reduce the

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impact of any possible order effects, these questionnaires were presented in a randomized order. Finally, participants were given a measure of social desirability (Marlowe-Crowne Social Desirability Scale; Appendix H) and asked to complete a demographic questionnaire (Appendix A). After completing the study, the participants were thanked and entered a completion code in order to receive compensation for their time.

CHAPTER III

RESULTS

Sample Description

Table 1 includes all sample descriptive information.

Table 1. Characteristics of Sample

Variable	n (%)	M (SD)	Range
Age (years)		34.56 (11.66)	18 - 66
Gender			
Male	77 (56.6)		
Female	59 (43.4)		
Race/Ethnicity			
Asian/Pacific Islander American	7 (5.1)		
Black/African American	10 (7.4)		
Caucasian/European American	97 (71.3)		
Hispanic/Latino(a) American	11 (8.1)		
Middle-Eastern/Arab American	3 (2.2)		
Other or Multiracial/multiethnic	8 (5.9)		

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Table 1. cont.

Variable	*n* (%)	*M* (*SD*)	Range
Sexual Orientation			
Heterosexual	113 (83.1)		
Lesbian or gay	6 (4.4)		
Bisexual	16 (11.8)		
Prefer not to answer	1 (0.7)		
Marital Status			
Single/Never Married	76 (55.9)		
Married/Partnered	46 (33.8)		
Divorced/Separated	13 (9.6)		
Widowed	1 (0.7)		
Currently in a romantic relationship			
Yes	87 (64.0)		
No	49 (36.0)		
Length of current romantic relationship			
<1 year	17 (12.5)		
1 to 3 years	22 (16.2)		
3 to 5 years	9 (6.6)		
>5 years	38 (27.9)		

Table 1. cont.

Variable	n (%)	M (SD)	Range
Have child(ren)			
Yes	45 (33.1)		
No	91 (66.9)		
Political orientation[a]		3.10 (1.89)	1 - 7
Religiosity level[b]		2.59 (2.00)	1 - 7
Religious affiliation			
Yes	56 (41.2)		
No	80 (58.8)		
Annual Household Income[c]			
< $20,000 per year	21 (15.4)		
$20,000 - $40,000 per year	33 (24.3)		
$41,000 - $60,000 per year	27 (19.9)		
$61,000 - $80,000 per year	20 (14.7)		
> $80,000 per year	35 (25.7)		
Highest level of education			
Less than High School	1 (0.7)		
High School/GED	12 (8.8)		
Some College	43 (31.6)		
Associate's Degree	13 (9.6)		

Table 1. cont.

Variable	*n* (%)	*M* (*SD*)	Range
Bachelor's Degree	49 (36.0)		
Masters Degree	11 (8.1)		
Doctoral Degree	1 (0.7)		
Professional Degree	6 (4.4)		
Current employment status			
Full-time	61 (44.9)		
Part-time by choice	27 (19.9)		
Part-time, prefer full-time	8 (5.9)		
Unemployed by choice	13 (9.6)		
Unemployed, would prefer not to be	27 (19.9)		
Concern about Internet Pornography Use[d]			
Yes	15 (11.0)		
No	121 (89.0)		
Criminal History			
Arrested			
Yes	20 (14.7)		
No	116 (85.3)		
Charged with a crime			
Yes	21 (15.4)		
No	115 (84.6)		

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Table 1. cont.

Variable	n (%)	M (SD)	Range
Convicted or pled guilty to a crime			
Yes	20 (14.7)		
No	116 (85.3)		
Sexual Offense (SO) History			
Accused			
Yes	2 (1.5)		
No	134 (98.5)		
Charged			
Yes	1 (0.7)		
No	135 (99.3)		
Convicted or pled guilty			
No	136 (100)		
Victim History			
Victim of SO			
Yes	22 (16.2)		
No	114 (83.8)		
Acquaintance History			
Accused, charged, or convicted of SO[e]			
Yes	39 (28.7)		
No	97 (71.3)		

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Table 1. cont.

Variable	n (%)	M (SD)	Range
On SO registry[f]			
Yes	27 (19.9)		
No	109 (80.1)		
Victim of SO[g]			
Yes	64 (47.1)		
No	72 (52.9)		

Note. [a]: 1= Strongly liberal; 7= Strongly conservative. [b]: 1= Not at all religious; 7= Very religious. [c]: For participants that indicated they were dependents of parents, parent's annual income was also obtained; the higher value of the two incomes was utilized. [d]: "Have you ever been concerned about your internet pornography use, or has anyone ever told you that they are concerned about your internet pornography use?" [e]: "Have you ever known anyone who has been accused, charged, or convicted of a sexual offense?" [f]: "Have you ever known anyone who has been on the sexual offender registry?" [g]: "Have you ever known anyone who has been the victim of a sexual offense?"

Bivariate correlations and a series of one-way analyses of variance were conducted on all sample characteristics and scale scores to determine presence of possible covariates for main analyses. All significant results are listed in Table 2. All scale score information is presented in Table 3.

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Table 2: Pearson correlation coefficients among sample characteristics and scale scores.

Variable	Pornography Acceptability[a]	Pornography Usage (in days)[b]	SEM Type Exposure	SEM Type Usage	CP	CGCP	Treatment Utility	Offense Risk	C&SA	Harm	Fairness	Ingroup	Authority	Purity
Age (years)	-.30***	-.26**	.08	-.17	.13	.21*	.20*	.29***	-.11	.10	.01	.01	.13	.22**
Gender	-.13	-.37***	-.07	-.32***	.12	.10	.90	.16	-.27**	.31***	.26**	-.90	-.20	-.03
Race/Ethnicity	-.09	.07	-.00	.04	.08	-.07	-.01	-.09	-.06	.08	.11	-.05	-.03	-.07
Sexual orientation	.06	.07	.16	.19*	-.03	-.13	-.15	-.18*	-.06	.20*	.23**	-.20*	-.23**	-.20*
Marital status	-.07	-.26**	.17*	-.10	.15	.18*	.09	.18*	-.12	.13	.11	-.06	.07	.07
Currently in romantic relationship	.05	.14	-.00	.07	.18*	-.15	-.22*	-.19*	.19*	-.01	.08	-.06	-.05	-.01
Length of current romantic relationship	-.24*	-.33**	-.07	-.26*	.08	.10	.19	.21	-.01	.03	-.06	.02	.06	.18
Have child(ren)	.30***	.32***	.03	.23**	-.16	-.20*	-.29**	-.30***	-.19*	-.12	-.11	-.04	-.12	-.19*
Political orientation	-.21*	.00	-.06	-.04	.22**	.23**	.26**	.25**	.03	-.16	.26*	.22*	.42***	.46***
Religiosity level	-.56***	-.27**	-.25**	-.34***	.09	.20*	.15	.26**	.04	-.02	-.05	.11	.25**	.48***
Household income	.08	-.03	-.12	.03	-.09	-.04	.06	.04	.06	-.08	-.17*	.06	.00	.03
Education level	-.00	.02	.04	.07	-.02	.02	.13	.13	-.05	-.12	-.15	.00	-.03	-.04
Employment status	-.05	.01	.10	.01	-.05	-.11	-.03	-.02	-.16	.09	.11	-.06	-.04	-.03
Concern about internet pornography use	.10	-.11	-.04	-.06	.13	.13	.02	.12	-.17*	-.04	-.07	-.07	-.07	-.16
Arrested	-.07	-.07	-.09	-.11	-.03	.03	.08	.03	.08	-.13	-.22**	.04	.16	.22*
Charged with a crime	-.04	-.02	-.10	-.10	-.06	.00	.02	.00	.12	-.17*	-.20*	-.02	.05	.11
Convicted or pled guilty to a crime	-.07	-.04	-.15	-.16	-.01	.05	.09	.07	.08	-.13	-.20*	-.01	.09	.18*
Accused of SO[c]	-.01	.01	.02	-.07	.06	.02	.13	.07	-.06	.03	-.02	-.10	-.10	-.03
Charged with SO	-.01	-.05	-.03	-.18*	.12	.07	.15	.05	-.19*	.09	.01	-.04	.03	.08
Convicted or pled guilty to SO	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Victim of a SO	.25**	.13	-.03	.12	-.02	.10	.03	-.01	.12	-.06	-.02	.08	-.03	-.11
Acquaintance of person accused, charged, or convicted of SO[d]	.02	-.02	-.17	-.03	-.04	.14	-.01	.06	.03	-.13	-.19*	.17*	.09	.08
Acquaintance of person on SO registry[e]	.13	-.03	-.06	.03	.00	.01	-.03	-.05	.00	-.04	-.15	.13	-.03	-.05
Acquaintance of victim of SO[f]	.20*	.20*	-.23**	.08	-.12	.03	-.00	-.11	.17	-.24**	-.17*	.13	.07	-.04

Note. [a] = "Viewing or reading pornographic material (such as magazines, movies, and/or Internet sites) is an acceptable activity." Responses: 1 = Very strongly disagree; 7 = Very strongly agree. [b] = "During the past 12 months, on average, how many days per month did you view pornographic material (such as magazines, movies, and/or Internet sites)?" [c] SO = sexual offense. [d] = "Have you ever known anyone who has been accused, charged, or convicted of a sexual offense?" [e] = "Have you ever known anyone who has been on the sexual offender registry?" [f] = "Have you ever known anyone who has been the victim of a sexual offense?"

*p < .05. **p < .01. ***p < .001.

Table 3: Descriptive statistics for individual scales and subscales

Scale/Subscale	M (SD)	Observed Minimum	Observed Maximum
Pornography Acceptance[a]	4.88 (1.90)	1	7
Pornography Usage (in days)[b]	8.09 (9.39)	0	30
SEM Type Exposure	7.97 (3.49)	0	14
SEM Type Usage	24.35 (7.90)	14	54
Child Pornography (CP)	146.96 (32.43)	24	168
CP age 7 or younger	49.49 (11.29)	8	56
CP age 8 to 12	50.11 (10.65)	8	56
CP age 13 to 17	47.36 (12.98)	8	56
Computer-generated Child Pornography (CPCG)	134.28 (44.49)	24	168
CGCP age 7 or younger	45.07 (15.10)	8	56
CGCP age 8 to 12	45.82 (14.78)	8	56
CGCP age 13 to 17	43.38 (16.31)	8	56
Treatment Utility	21.98 (6.84)	4	28
Offense Risk	50.12 (13.98)	10	70
Children & Sexual Activities Inventory (C&SA)	86.54 (27.72)	54	189
Harm	3.47 (0.92)	0	4.83
Fairness	3.29 (0.85)	0.17	5.00
Ingroup	2.24 (0.98)	0	4.83
Authority	2.54 (1.00)	0	4.67
Purity	2.30 (1.22)	0	4.83

Note. [a] = "Viewing or reading pornographic material (such as magazines, movies, and/or Internet sites) is an acceptable activity." [b] = "During the past 12 months, on average, how many days per month did you view pornographic material (such as magazines, movies, and/or Internet sites)?"

Support for Illegality of Computer-Generated Child Pornography

A paired-samples t-test was conducted to evaluate the support for illegality of

actions (i.e., distribution/transmission, creating/manufacturing, downloading/possessing,

and accessing/viewing without downloading) involving computer-generated child pornography (as measured by the CGCP subscales) compared to child pornography depicting real minors (as measured by the CP subscales). For the age range 7 years old or younger, there was a statistically significant decrease in support for illegality between child pornography ($M = 49.49$, $SD = 11.29$) and computer-generated child pornography ($M = 45.07$, $SD = 15.10$), $t(135) = 5.00$, $p < .001$. For the age range 8 to 12 years old, there was a statistically significant decrease in support for illegality between child pornography ($M = 50.11$, $SD = 10.65$) and computer-generated child pornography ($M = 45.82$, $SD = 14.78$), $t(135) = 4.75$, $p < .001$. For the age range 13 to 17 years old, there was a statistically significant decrease in support for illegality between child pornography ($M = 47.36.11$, $SD = 12.98$) and computer-generated child pornography ($M = 43.38$, $SD = 16.31$), $t(135) = 5.25$, $p < .001$.

Pornography Acceptance and Usage

The relationship between pornography acceptance, as measured by the item "Viewing or reading pornographic material (such as magazines, movies, and/or Internet sites) is an acceptable activity," and support for illegality of computer-generated child pornography, as measured by the CGCP scale, was investigated using Pearson product-moment correlation coefficient. There was a negative relationship between the two variables, $r = -.23$, $p = .008$, with lower acceptance of pornography associated with higher support for illegality of computer-generated child pornography.

The relationship between pornography usage in days [as measured by the item "During the past 12 months, on average, how many days per month did you view pornographic material (such as magazines, movies, and/or Internet sites)?"] and support

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for illegality of computer-generated child pornography (as measured by the CGCP scale) was investigated using Pearson product-moment correlation coefficient. There was a negative relationship between the two variables, $r = -.18$, $p = .033$, with lower pornography usage (i.e., viewing pornography fewer days per month on average during the past year) associated with higher support for illegality of computer-generated child pornography.

Sexually Explicit Material Interests

The relationship between usage frequency of multiple types of sexually explicit material (as measured by the SEM Type Usage scale) and support for illegality of computer-generated child pornography (as measured by the CGCP scale) was investigated using Pearson product-moment correlation coefficient. No significant relationship between the two variables was found, $r = -.11$, *ns*.

Attitudes about Children and Sexual Activities

The relationship between attitudes about children and sexual activities (as measured by the C&SA Scale) and support for illegality of computer-generated child pornography (as measured by the CGCP scale) was investigated using Pearson product-moment correlation coefficient. There was a negative relationship between the two variables, $r = -.25$, $p = .004$, with lower endorsement of cognitive schemas supporting children and sexual activities (i.e., lower C&SA scale scores) associated with higher support for illegality of computer-generated child pornography.

Moral Foundations

The relationship between the five foundations of Moral Foundations Theory (as measured by the MFQ) and support for illegality of computer-generated child

pornography (as measured by the CGCP scale) was investigated using Pearson product-moment correlation coefficients for each foundation. There was a positive relationship between support for illegality of computer-generated child pornography and the Ingroup Scale ($r = .26$, $p = .003$), the Authority Scale ($r = .36$, $p < .001$), and the Purity Scale ($r = .35$, $p < .001$), with higher support for illegality of computer-generated child pornography associated with higher scores on these scales. Although they were also positive correlations, the relationship between support for illegality of computer-generated child pornography and the Harm Scale ($r = .08$, *ns*) and the Fairness Scale ($r = .06$, *ns*) were not significant.

Treatment Utility and Offending Risk

A one-sample t-test was conducted against the midpoint in order to examine public perceptions regarding the use of computer-generated child pornography in treatment for adults with sexual interest in children (ASIC). Results indicated that the participants did not support the use of computer-generated child pornography in treatment for ASIC, nor did they believe that it would be an effective treatment, $t(135) = 10.20$, $p < .001$, ($M = 21.98$, $SD = 6.84$).

A one-sample t-test was conducted against the midpoint in order to examine public perceptions regarding the effect of viewing computer-generated child pornography on risk of contact offending. Results indicated that participants believed the use of computer-generated child pornography would increase a person's risk for engaging in a sexual offense against a real person, $t(135) = 8.44$, $p < .001$, ($M = 50.12$, $SD = 13.98$).

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CHAPTER IV

DISCUSSION

This study examined public perceptions of computer-generated child pornography and its association with pornographic material acceptance, usage, and sexual interests. Additionally, attitudes regarding the use of computer-generated child pornography in treatment and its effect on risk of contact offending were explored. Endorsement of cognitive schemas supporting children and sexual activities was measured to examine the relationship with support for illegality of computer-generated child pornography. Finally, Moral Foundations Theory was utilized to interpret differences in support for illegality of computer-generated child pornography from a morality perspective.

Attitudes towards Computer-Generated Child Pornography

The hypothesis that there would be little support for the use of computer-generated child pornography was confirmed. Regardless of age range, actions (i.e., distribution/transmission, creating/manufacturing, downloading/possessing, and accessing/viewing without downloading) involving computer-generated child pornography had significantly lower support for illegality when compared to that involved child pornography. However, despite this significant difference between the two groups, support for illegality of computer-generated images was still high, indicating agreement that such images should be illegal. These results failed to support past research by McCabe (2000) who found that 92.3% of participants felt viewing sexual material containing computer-generated children was acceptable. One possible explanation for

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these seemingly contradictory findings is the difference in operational definitions. McCabe (2000) did not present any type of definition for computer-generated children in sexual materials, whereas the current study defined it as "virtual images that do not involve real people." Further, assuming support for illegality of child pornography represents a similar construct as supporting incarceration for those guilty of such offenses, these results provide additional support for past research by Mears and colleagues (2008). Mears and colleagues' (2008) national telephone survey found 89% of participants supported incarceration for the distribution of child pornography, and 68% supported incarceration for accessing child pornography. Given the current study's findings of high support for illegality of child pornography and computer-generated child pornography, it is possible that lay people would also support the incarceration of offenders convicted of computer-generated child pornography related offenses; however, this should further be examined in future research. Overall, these findings are consistent with and support the current legal standards regarding computer-generated child pornography.

This study also included exploratory examinations of public perceptions regarding the utility of computer-generated child pornography use as a treatment component for adults with sexual interest in children, as well as perceived effects of computer-generated child pornography use on risk of contact offending. Analysis results indicated that lay people do not believe the use of computer-generated child pornography in treatment would be appropriate or effective. Further, participants believed viewing computer-generated child pornography would increase a person's risk for committing a contact offense. In addition, participants in the current sample did not believe that viewing

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computer-generated child pornography was an acceptable activity for adults with sexual interest in children. These findings provide additional support for the hypothesis that laypersons would not view the use of computer-generated child pornography as acceptable. No known previous research has assessed public perceptions about the utility of computer-generated child pornography in treatment and its effect on contact offending risk. In light of these findings, an important distinction to be made is that no known published research has been conducted on the effects of computer-generated child pornography. Therefore, public attitudes reflected in these findings simply represent participants' opinions and are not supported by any scientific studies. Furthermore, several research studies have found that non-contact offenders, such as child pornography offenders, particularly those without a prior criminal history, are at a low risk for becoming contact offenders (e.g., Seto & Eke, 2005; Seto et al., 2011). In the absence of prospective longitudinal studies, the role of child pornography, including computer-generated child pornography, in risk of contact offending cannot be fully understood.

Pornography Acceptance, Usage, and Sexual Interests

In order to evaluation perceptions of illegal pornography, participants' attitudes regarding acceptance of general pornography, as well as usage and type viewed, were important to include in the present study. Pornography acceptance and usage were found to be negatively associated with higher support for illegality of computer-generated child pornography. Participants who rated pornography as less acceptable and viewed pornography less frequency significantly endorsed higher levels of support for illegality of computer-generated child pornography. Thus, the hypothesis regarding support for

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illegality of computer-generated child pornography would have a negative relationship with acceptance and usage of pornography was confirmed.

Despite a significant relationship between pornography acceptance and usage, there was no support for the hypothesis that wider sexual interests, as measured by usage frequency of multiple pornography types, would be negatively related to support for illegality of computer-generated child pornography. A negative correlation between the two variables was observed, but was not significant. Future research should undergo efforts to utilize samples that have more equal representation across types of sexual explicit material viewed so that group differences can be considered.

Attitudes about Children and Sexual Activities

In recent years, efforts have been undertaken to identify and access distorted thinking patterns and maladaptive beliefs (i.e., cognitive distortions) used in the facilitation and justification of sexual offending among child pornography offenders (Howitt & Sheldon, 2007; Merdian et al., 2014). Given that these exploratory studies did not include a non-offending normative comparison sample, establishing the endorsement rates of proposed cognitive distortions in a community sample would be a contribution to research in this area.

The present study found that higher endorsements of proposed cognitive distortions (i.e., higher scores on the C&SA) had a negative relationship with support for illegality of computer-generated child pornography. Participants with a lower endorsement of cognitive schemas supporting children and sexual activities had significantly higher levels of support for illegality of computer-generated child pornography, supporting the original hypothesis. Nevertheless, C&SA scores overall

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were very low, with most item endorsements corresponding to levels of disagreement (i.e., 1, 2, and 3 on a 7-point scale). This finding among a normative sample is not surprising, especially when considering that child pornography offenders endorse fewer cognitive distortions than other child sexual offenders (e.g., Howitt & Sheldon, 2007; Merdian et al., 2014). In addition, analysis results provide support for several concerns regarding cognitive distortion assessment, which were discussed by Merdian and colleagues (2014). Specifically, several items in the scale did have higher endorsement rates, suggesting that not all the items meet the definition of cognitive distortions (i.e., thoughts that are dysfunctional or not widely endorsed). All in all, Merdian and colleagues' (2014) concerns regarding the content validity of proposed cognitive distortions are supported by the findings of this study. Furthermore, additional research into cognitive distortions specific to child pornography offenders is essential before these can be included as a focus of treatment.

Moral Foundations

Moral Foundations Theory has been utilized to determine where differences exist between people when they make morally relevant decisions. No known published research has utilized Moral Foundations Theory to examine perceptions of pornography, let alone whether or not laypersons support illegality of computer-generated child pornography. As hypothesized, support for illegality of computer-generated child pornography revealed several significant relationships with the foundations. A positive relationship was observed between support for illegality of computer-generated child pornography and the following foundations: Ingroup/loyalty, Authority/respect, and Purity/sanctity. These findings support Haidt and Graham's (2007) position that the

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moral domain is broader than moral concerns related to justice and care, given that the foundations corresponding to justice and care (Fairness/reciprocity and Harm/care, respectively) did not have significant relationships with participants' levels of support for illegality of computer-generated child pornography. Furthermore, the Ingroup/loyalty, Authority/respect, and Purity/sanctity foundations comprise the "binding foundations" of groups and societies. The study's findings provide support that varying levels of endorsement and use of these three binding foundations are relevant to differences in moral concerns regarding legal issues (Graham et al., 2011; Haidt & Graham, 2007).

Limitations and Future Research

As with any research, this study is not without its limitations. First, a potential limitation is that the study relied solely on self-report data. The highly transparent nature of the scale items constitutes another methodological limitation for this data. Although socially desirable responding was taken into account, participants may still have been hesitant to provide a wider range of opinions given the polarity of issues examined. Another limitation is that it is unknown what participants' were imagining when asked about child pornography and computer-generated child pornography, given that both images are illegal and very few respondents endorsed ever seeing child pornography ($n = 7$). Future research may consider obtaining such information. Further, although little support was found for the use and acceptance of computer-generated child pornography, the description of computer-generated child pornography may have been too ambiguous for participants to provide an informed decision. Overall, future research may also wish to examine the mechanisms underlying how public perceptions regarding child pornography and computer-generated child pornography are formed.

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Data collection for this study was conducted solely online, which has both documented advantages and disadvantages. Several studies have found participants recruited from Amazon's Mechanical Turk tend to complete surveys with more honesty and as accurately as lab participant and web-based experiment samples (Mason & Suri, 2012; Paolacci, Chandler, & Ipeirotis, 2010; Shapiro, Chandler, & Mueller, 2013). However, Chandler, Mueller, and Paolacci (2013) found that Amazon's Mechanical Turk workers may not be as naive as researchers want them to be because there are online discussion boards where workers will discuss studies and requesters, which can affect who chooses to participate and possibly responses. Additionally, due to the nature of this study, it is possible that the participants who chose to complete the study may have been interested in the topic, had strong opinions about the topic, or were more comfortable disclosing information about sexual material (Wiederman, 1999). This self-selection bias limits the generalizability of these results. Furthermore, previous research regarding pornography use has documented differences based on administration method (i.e., direct administration versus online data collection; Wetterneck, Burgess, Short, Smith, & Cervantes, 2012). For these reasons, future research may wish to include a non-electronic data collection.

In several measures used in this study, the age of the child was varied, while gender remained neutral and was not specified. Likewise, gender-neutral terms (e.g., adult) were also used across measures. Information was not obtained on which gender the participants were imagining for either the child or the adult. Although the majority of child pornography images portray female victims (Quayle & Jones, 2011), the general population is may be unaware of the gender content of child pornography. Lam and

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colleagues' (2010) examined how age and gender of offender and depicted minor influenced perceptions of child pornography offenses. Regardless of the minor's gender, participants rated the offense as more severe if the depicted minor was younger. Furthermore, participants' perceptions of offense severity were not affected by the offender's age and gender; however, male offenders were perceived to be at higher risk for a future child pornography offense (Lam et al., 2010). Given these findings and since child pornography images may contain both boys and girls, further research may wish to consider examining the effects of specifying and varying gender of the child and the adult in the measures on reported attitudes.

Conclusion

Limitations notwithstanding, the findings of this study are still of value. This research is the first known to examine perceptions of computer-generated child pornography in depth. Overall, although participants supported illegality, pornography acceptance and usage did have an impact on agreement with current laws regarding simulated images. Moreover, this study lends additional support to research that has posited that normative endorsement levels of schemas supporting children and sexual activities need to be established in order to consider these as cognitive distortions. Further, Moral Foundations Theory can provide insight why different individuals endorse varying levels of agreement with illegality of computer-generated child pornography. Although the current study established valuable information on public perceptions related to computer-generated child pornography, future research may wish to continue to explore the impact of child and adult gender, as well as assess how lay perceptions of child pornography and computer-generated child pornography are formed.

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APPENDICES

Demographic Questionnaire

Please provide the following information:

Age: _____ years old

Gender:

_____ Male

_____ Female

_____ Transgender

Race/Ethnicity: (Please select all that apply)

_____ Asian / Pacific Islander American

_____ Black / African American

_____ Caucasian (White) / European American

_____ Hispanic / Latino American

_____ Middle-Eastern / Arab American

_____ Native American / Alaskan Native

_____ Other: _____

Sexual Orientation:

_____ Heterosexual

_____ Lesbian or gay

_____ Bisexual

Relationship Status:

_____ Single/Never Married

_____ Married/Partnered

_____ Divorced/Separated

_____ Widowed

Are you currently in a romantic relationship?

_____ Yes

_____ No

Length of your current romantic relationship: _____ months _____ years

Number of people in your household: _____

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Do you have children?

     _____ Yes

     _____ No

If yes, how many children are in the home? _____

Household Income:

     _____ Less than $20,000 per year

     _____ $20,000 - $40,000 per year

     _____ $41,000 - $60,000 per year

     _____ $61,000 - $80,000 per year

     _____ More than $80,000 per year

Parents' Annual Income (if dependent of parent):

     _____ Less than $20,000 per year

     _____ $20,000 - $40,000 per year

     _____ $41,000 - $60,000 per year

     _____ $61,000 - $80,000 per year

     _____ More than $80,000 per year

Highest level of education you have completed:

     _____ Less than High School

     _____ High School / GED

     _____ Some College

     _____ 2-year College Degree (Associate's Degree)

     _____ 4-year College Degree (Bachelor's Degree)

     _____ Masters Degree

     _____ Doctoral Degree

     _____ Professional Degree (JD, MD)

Current employment status:

     _____ Employed full-time

     _____ Employed part-time by choice

     _____ Employed part-time but prefer full-time

     _____ Unemployed by choice

     _____ Unemployed but would prefer not to be

What is your current occupation? _____

Do you work with sex offenders? (For example: treatment provider, probation/parole officer)

     _____ Yes   _____ No

If yes, what is your role with sex offenders? (Check all that apply)

     _____ Community-based sex offender treatment provider

     _____ Corrections/prison-based treatment provider

_____ Residential treatment provider
_____ Sex offender treatment program administrator/manager
_____ Law enforcement personnel
_____ Attorney/Legal personnel
_____ Other (please describe):

_____

Do you work with victims/survivors of a sexual offense?
_____ Yes _____ No

If yes, what is your role with victim/survivors? (Check all that apply)
_____ Community-based treatment provider
_____ Residential treatment provider
_____ Victim/survivor treatment program administrator/manager
_____ Law enforcement personnel
_____ Attorney/Legal personnel
_____ Other (please describe):

_____

How would you describe your political orientation? (Select the number that best reflects you)

Strongly Liberal			Moderate			Strongly Conservative
1	2	3	4	5	6	7

How would you describe your level of religiosity? (Select the number that best reflects you)

Not at all Religious			Moderately Religious			Very Religious
1	2	3	4	5	6	7

Do you have a religious affiliation?
_____ Yes _____ No

If yes, what is your religious affiliation? _____

Have you ever been concerned about your internet pornography use or has anyone ever told you that they are concerned about your internet pornography use?
_____ Yes _____ No

Have you ever been arrested?
_____ Yes _____ No

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Have you ever been charged with a crime?

    _____ Yes   _____ No

Have you ever been convicted of or pled guilty to a crime (felony or misdemeanor)?

    _____ Yes   _____ No

Have you ever been accused of a sexual offense?

    _____ Yes   _____ No

Have you ever been charged with a sexual offense?

    _____ Yes   _____ No

Have you ever been convicted of a sexual offense?

    _____ Yes   _____ No

Have you ever known anyone who has been accused, charged, or convicted of a sexual offense?

    _____ Yes   _____ No

Have you ever known anyone who has been on the sexual offender registry?

    _____ Yes   _____ No

Have you ever been the victim of a sexual offense?

    _____ Yes   _____ No

Have you ever known anyone who has been the victim of a sexual offense?

    _____ Yes   _____ No

Pornography Acceptability and Usage Questionnaire

Please indicate the degree to which you agree or disagree with the following item:

1	2	3	4	5	6	7
Very Strongly Disagree						Very Strongly Agree

_____ Viewing or reading pornographic material (such as magazines, movies, and/or Internet sites) is an acceptable activity.

During the past 12 months, on average, how many days per month did you view pornographic material (such as magazines, movies, and/or Internet sites)?

_____ (0-30 days)

APPENDIX C

Sexual Material Usage Questionnaire

For the next set of questions, sexually explicit material is defined as any material that infers or portrays sexuality, sexual interest, or sexual activity.

Please answer the following questions.

Type of Sexually Explicit Material	In your lifetime, have you seen/read this type of sexually explicit material?	If yes, how arousing did you find this type of sexually explicit material? (1=*not at all arousing,* 7=*very arousing*)	If yes, how often do you view this type of sexually explicit material?
Oral sex	Yes No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)
Vaginal sex	Yes No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)
Anal sex	Yes No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)
Men together	Yes No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)
Women together	Yes No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)
Man with multiple women	Yes No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times per week (4) Daily (5)
Woman with multiple men	Yes No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)

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				Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4)
Bondage	Yes	No	(Low) 1 2 3 4 5 6 7 (High)	Daily (5)
Sado- masochism	Yes	No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)
Fecal matter or urine	Yes	No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)
Rape/Forced sex	Yes	No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)
Children	Yes	No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)
"Barely Legal"	Yes	No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)
Sexual activity with animals	Yes	No	(Low) 1 2 3 4 5 6 7 (High)	Never (1) Less than once a month (2) 1-3 times a month (3) 1 or more times a week (4) Daily (5)

Attitudes towards Computer-Generated Child Pornography Questionnaire 1

For the next set of questions, computer-generated pictures/videos are defined as virtual images that do not involve real people.

Using the scale below, please indicate the extent you agree or disagree with each of the items.

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

	Type of Sexually Explicit Material			
	Pictures/ videos with nudity of individuals 7 years old or younger	Pictures/ videos of sexual acts of individuals 7 years old or younger	Computer-generated pictures/videos or drawings with nudity of individuals appearing to be 7 years old or younger	Computer-generated pictures/videos or drawings of sexual acts of individuals appearing to be 7 years old or younger
Distribution/transmission of this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Creating/manufacturing this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Downloading/possessing this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Accessing/viewing without downloading this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7

	Type of Sexually Explicit Material			
	Pictures/ videos with nudity of individuals 8 to 12 years old	Pictures/ videos of sexual acts of individuals 8 to 12 years old	Computer-generated pictures/videos or drawings with nudity of individuals appearing to be 8 to 12 years old	Computer-generated pictures/videos or drawings of sexual acts of individuals appearing to be 8 to 12 years old
Distribution/transmission of this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Creating/manufacturing this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Downloading/possessing this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Accessing/viewing without downloading this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7

	Type of Sexually Explicit Material			
	Pictures/ videos with nudity of individuals 13 to 17 years old	Pictures/ videos of sexual acts of individuals 13 to 17 years old	Computer-generated pictures/videos or drawings with nudity of individuals appearing to be 13 to 17 years old	Computer-generated pictures/videos or drawings of sexual acts of individuals appearing to be 13 to 17 years old
Distribution/transmission of this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Creating/manufacturing this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Downloading/possessing this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
Accessing/viewing without downloading this type of material should be illegal.	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7

Attitudes towards Computer-Generated Child Pornography Questionnaire 2

For the next set of questions, computer-generated sexual material is defined as virtual images that do not involve real people.

Using the scale below, please indicate the extent you agree or disagree with each of the items.

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

1. Viewing computer-generated children in sexual material will increase the risk of a person offending against a real person between the ages of 0 and 12.

2. Viewing computer-generated children in sexual material will decrease the desire for a person to offend against a real person between the ages of 0 and 12.

3. Viewing computer-generated children in sexual material will increase the frequency of urges for a person to offend against a real person between the ages of 0 and 12.

4. Viewing computer-generated children in sexual material will increase the severity of urges for a person to offend against a real person between the ages of 0 and 12.

5. Viewing computer-generated children in sexual material is acceptable for adults with sexual interest in people between the ages of 0 and 12.

6. Using computer-generated sexual material in therapy for adults with sexual interest in people between the ages of 0 and 12 is an appropriate treatment method.

7. Using computer-generated sexual material is an effective treatment method for adults with sexual interest in people between the ages of 0 and 12.

8. Viewing computer-generated children in sexual material will increase the risk of a person offending against a real person between the ages of 13 and 17.

9. Viewing computer-generated children in sexual material will decrease the desire for a person to offend against a real person between the ages of 13 and 17.

10. Viewing computer-generated children in sexual material will increase the frequency of urges for a person to offend against a real person between the ages of 13 and 17.

11. Viewing computer-generated children in sexual material will increase the severity of urges for a person to offend against a real person between the ages of 13 and 17.

12. Viewing computer-generated children in sexual material is acceptable for adults with sexual interest in people between the ages of 13 and 17.

13. Using computer-generated sexual material in therapy for adults with sexual interest in people between the ages of 13 and 17 is an appropriate treatment method.

14. Using computer-generated sexual material is an effective treatment method for adults with sexual interest in people between the ages of 13 and 17.

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Children and Sexual Activities Inventory (C&SA)

Please read each statement below and rate to what extent you agree or disagree with each statement using the following scale:

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

1. Sometimes children don't say no to sexual activity with adults because they are curious about sex or enjoy it.

2. A child can make their own decision as to whether to have sexual activities with an adult or not.

3. Because adults have high sexual needs it is not always possible to control sexual urges.

4. Some people who have sex offenses involving children are not true "sex offenders"- they are just out of control and make a mistake.

5. Some children are willing and eager to be involved in sexual activities that are with, and for, adults.

6. Children don't tell others about sexual activities involving adults probably because they liked it or weren't bothered by it.

7. Having sexual thoughts and fantasies about a child isn't all that bad because at least it is not really hurting the child.

8. Some sexual relations with children are a lot like adult sexual relationships.

9. Just looking at a naked child is not as bad as touching and will probably not affect the child as much.

10. Sometimes the child instigates the sexual activity with the adult.

11. Some people turn to sexual activities involving children because they were deprived of sex from adult partners.

12. Children who get molested by more than one adult probably are doing something to attract adults to them.

13. For many adults their sexual offenses involving children were the result of stress and the offending behavior helped to relieve that stress.

14. Some adults involve children with sexual activities because they think the child would enjoy how it feels.

15. Sometimes the offender suffers, loses or is hurt the most.

16. Children are more reliable and more trusting than adults.

17. Some children are mature enough to enjoy sexual activities with, and for, adults.

18. Children are supposed to do what adults want and this might include serving their sexual needs.

19. A person should have sex whenever it is needed.

20. Children, who have been involved in sexual activities with, and for, adults will eventually get over it and get on with their lives.

21. The only way to do harm to a child when involving them in sexual activities would be to use physical force to get them to do it.

22. Society makes much bigger deals out of sexual activities involving adults with children than they really are.

23. Some children act seductively towards adults.

24. A lot of the time adults do not plan their sex offenses involving children – they just happen.

25. Some professionals pursue some people involved in abuse in order to make themselves look good.

26. Many children who are involved in sexual activities with, or for, adults do not suffer major problems because of it.

27. Involving children in sexual activities with, or for adults, can be an acceptable way of controlling and punishing the child.

28. Sexual activities with children can make a child feel closer to adults.

29. It is society's reaction, rather than the sexual abuse itself, which causes the distress a child feels.

30. If a child looks at an adult's genitals, the child is probably interested in sex.

31. Children give adults more acceptance and more love than other adults.

32. Children are innocent and want to please adults.

33. Adults should be able to have sex with whomever they want.

34. Sexual activities involving adults and children can help the child learn about sex.

35. Sometime in the future our society will realize that sex between a child and adult is alright.

36. Many adults commit sex offenses involving children because they were sexually abused as a child.

37. Sometimes touching a child sexually can be a way to show them love and affection.

38. Adults engage in sexual activities with children as one way of getting back at someone, e.g. the child, parent, wife, etc.

39. A person can sometimes be justified in engaging in sexual activities that are with, or that involve children, if their partner isn't interested in sex.

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APPENDIX G

Moral Foundations Questionnaire (MFQ)

Part 1. When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using this scale:

[0] = not at all relevant (This consideration has nothing to do with my judgments of right and wrong)
[1] = not very relevant
[2] = slightly relevant
[3] = somewhat relevant
[4] = very relevant
[5] = extremely relevant (This is one of the most important factors when I judge right and wrong)

1. Whether or not someone suffered emotionally
2. Whether or not some people were treated differently than others
3. Whether or not someone's action showed love for his or her country
4. Whether or not someone showed a lack of respect for authority
5. Whether or not someone violated standards of purity and decency
6. Whether or not someone was good at math
7. Whether or not someone cared for someone weak or vulnerable
8. Whether or not someone acted unfairly
9. Whether or not someone did something to betray his or her group
10. Whether or not someone conformed to the traditions of society
11. Whether or not someone did something disgusting
12. Whether or not someone was cruel
13. Whether or not someone was denied his or her rights
14. Whether or not someone showed a lack of loyalty
15. Whether or not an action caused chaos or disorder
16. Whether or not someone acted in a way that God would approve of

Part 2. Please read the following sentences and indicate your agreement or disagreement:

0	1	2	3	4	5
Strongly disagree	Moderately disagree	Slightly disagree	Slightly agree	Moderately agree	Strongly agree

17. Compassion for those who are suffering is the most crucial virtue.
18. When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.
19. I am proud of my country's history.
20. Respect for authority is something all children need to learn.
21. People should not do things that are disgusting, even if no one is harmed.
22. It is better to do good than to do bad.
23. One of the worst things a person could do is hurt a defenseless animal.
24. Justice is the most important requirement for a society.
25. People should be loyal to their family members, even when they have done something wrong.
26. Men and women each have different roles to play in society.
27. I would call some acts wrong on the grounds that they are unnatural.
28. It can never be right to kill a human being.
29. I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing.
30. It is more important to be a team player than to express oneself.
31. If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty.
32. Chastity is an important and valuable virtue.

Marlowe-Crowne Social Desirability Scale (MCSDS)

Listed below are a number of statements concerning personal attitudes and traits.
Read each item and select "True" if the statement is True for you, or select "False" if
the statement is False for you.

1. Before voting I thoroughly investigate the qualifications of all the candidates.
2. I never hesitate to go out of my way to help someone in trouble.
3. It is sometimes hard for me to go on with my work if I am not encouraged.
4. I have never intensely disliked anyone.
5. On occasion I have had doubts about my ability to succeed in life.
6. I sometimes feel resentful when I don't get my way.
7. I am always careful about my manner of dress.
8. My table manners at home are as good as when I eat out in a restaurant.
9. If I could get into a movie without paying and be sure I was not seen, I
   probably would do it.
10. On a few occasions, I have given up doing something because I thought
    too little of my ability.
11. I like to gossip at times.
12. There have been times when I felt like rebelling against people in authority
    even though I knew they were right.
13. No matter who I'm talking to, I'm always a good listener.
14. I can remember "playing sick" to get out of something.
15. There have been occasions when I took advantage of someone.
16. I'm always willing to admit it when I make a mistake.
17. I always try to practice what I preach.
18. I don't find it particularly difficult to get along with loud-mouthed, obnoxious
    people.
19. I sometimes try to get even rather than forgive and forget.
20. When I don't know something I don't at all mind admitting it.
21. I am always courteous, even to people who are disagreeable.
22. At times I have really insisted on having things my own way.
23. There have been occasions when I felt like smashing things.
24. I would never think of letting someone else be punished for my wrongdoings.
25. I never resent being asked to return a favor.
26. I have never been irked when people expressed ideas very different from my
    own.
27. I never make a long trip without checking the safety of my car.

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28. There have been times when I was quite jealous of the good fortunes of others.
29. I have almost never felt the urge to tell someone off.
30. I am sometimes irritated by people who ask favors of me.
31. I have never felt that I was punished without cause.
32. I sometimes think when people have a misfortune they only got what they deserved.
33. I have never deliberately said something that hurt someone's feelings.

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APPENDIX I

Informed Consent

You are invited to be in a research study about perceptions of child pornography. The purpose of this research study is to gain knowledge about aspects of moral reasoning that may impact acceptability of pornography consumption. Your participation is voluntary. You may choose not to participate or you may discontinue your participation at any time without penalty or loss of benefits to which you are otherwise entitled. Your decision whether or not to participate will not affect your current or future relations with the University of North Dakota. By pressing "Continue," you are consenting to participate. Approximately 200 people will take part in this study. Your participation in the study will last no longer than an hour.

You will be asked to complete a few questionnaires, which should take approximately 30 minutes. There will be no identifying information asked of you on any part of the survey so your responses are completely anonymous and confidential. There is no known risk in participating in this study and you are free to withdraw your participation at any time. While there are no direct benefits to the participants of this research study, the information acquired from this study will help to extend knowledge regarding factors that are related to and/or influence social perceptions of pornography.

During the study, you will be asked to complete a number of questionnaires. The risks of this study are minimal. Due the evaluative nature of completing questionnaires, some participants may feel uneasy. If you become upset by questions, you may stop answering them at any time or choose to not answer a question.

You benefit personally from being in this study by learning how some psychological research is conducted. We also hope that, in the future, other people might benefit from this study because we will better understand attitudes about pornography use and how character variables impact opinions.

You will not have any costs for being in this research study. If you complete this survey, you will be compensated with $0.50 for 30 minutes of your time. You will receive a completion code at the end of the study to paste into Mechanical Turk in order to receive compensation. The University of North Dakota and the research team are receiving no payments from other agencies, organizations, or companies to conduct this research study.

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The records of this study will be kept private to the extent permitted by law. In any report about this study that might be published, you will not be identified. Your study record may be reviewed by government agencies, and the University of North Dakota Institutional Review Board. No identifying information about participants will be reported or kept.

The researcher conducting this study is Beth Kliethermes. If you have any questions concerns, or complaints about this study, you may contact Beth Kliethermes at beth.kliethermes@my.und.edu.

If you have questions regarding your rights as a research subject, or if you have any concerns or complaints about the research, you may contact the University of North Dakota Institutional Review Board at (701) 777-4279. Please call this number if you cannot reach research staff, or you wish to talk with someone else.

If you are interested in participating, please click on the link below and follow the directions on the first page. You may print a copy of this form at the end of the study for your records.

Thank you for your time!

Sincerely,
Principal Investigator:
Beth Kliethermes, B.S.
Clinical Psychology Graduate Student
University of North Dakota
beth.kliethermes@my.und.edu

Thesis Chair:
April Bradley, Ph.D.
Associate Professor
University of North Dakota

Clicking below indicates that I have read the description of the study and I agree to participate this study.

____ I Agree

____ I Do Not Agree

APPENDIX J

Example of Mechanical Turk Recruitment Notice

Requester: Perceptions of Pornography Lab   Reward: $0.50   Duration: 30 minutes

Answer a psychological survey: "Perceptions of Pornography"

We are looking for participants to complete an academic survey on perceptions of pornography. Participants will be asked to complete several questionnaires and some demographic questions. The study will take approximately 30 minutes and participants will be awarded $0.50. At the end of the survey, you will receive a code to paste into the box below to receive credit for taking our survey.

This study has been approved by the University of North Dakota Institutional Review Board (#201502-239).

<u>Click here to take survey.</u>

Provide the survey code here:

[   ]

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