May 28th, 1:40 PM

Internet Addiction to Child Pornography

Rachel Sitarz  
*Knoy Hall of Technology, Purdue University, rsitarz@purdue.edu*

Marcus Rogers  
*Computer Information & Technology, Purdue University, rogersmk@purdue.edu*

Lonnie Bentley  
*Computer Information & Technology, Purdue University, bentleyl@purdue.edu*

Eugene Jackson  
*Associate Professor of Sociology, Purdue University, jacksone@purdue.edu*

Follow this and additional works at: [https://commons.erau.edu/adfsl](https://commons.erau.edu/adfsl)

Part of the Aviation Safety and Security Commons, Computer Law Commons, Defense and Security Studies Commons, Forensic Science and Technology Commons, Information Security Commons, National Security Law Commons, OS and Networks Commons, Other Computer Sciences Commons, and the Social Control, Law, Crime, and Deviance Commons

Scholarly Commons Citation

Sitarz, Rachel; Rogers, Marcus; Bentley, Lonnie; and Jackson, Eugene, "Internet Addiction to Child Pornography" (2014). *Annual ADFSL Conference on Digital Forensics, Security and Law*. 6.  
[https://commons.erau.edu/adfsl/2014/wednesday/6](https://commons.erau.edu/adfsl/2014/wednesday/6)

This Peer Reviewed Paper is brought to you for free and open access by the Conferences at Scholarly Commons. It has been accepted for inclusion in Annual ADFSL Conference on Digital Forensics, Security and Law by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu, wolfe309@erau.edu.
INTERNET ADDICTION TO CHILD PORNOGRAPHY

Rachel Sitarz, M.S.
Knoy Hall of Technology
rsitarz@purdue.edu

Marcus Rogers, PhD
Computer Information & Technology
cyberforensics@mac.com

Lonnie Bentley, PhD
Computer Information & Technology
bentleyl@purdue.edu

Eugene Jackson, PhD
Associate Professor of Sociology
jacksone@purdue.edu

Purdue University
West Lafayette, IN 47907

ABSTRACT

During the present age and time, it seems as though people in society have become addicted to nearly anything and everything, whether it be to a substance, an activity or an object. The Internet and pornography is no exception. While commonly thought of as a deviant behavior, many are displaying addictions towards the Internet and pornography. More alarming, however, are those who are viewing, downloading, or trading child pornography and displaying addictive Internet behaviors, for they are spending excessive amounts of time engaging in the proliferation of child pornographic materials. For this reason, addiction to the Internet and usage of child pornography are the main points of the current study. The self-reported survey, which was part of a larger project to fulfill requirements for a Master of Science degree, measured demographics, Internet usage and child pornography usage, to find valuable statistical data and to gain an understanding of those who are engaging in child exploitation on the Internet. The current study proved to measure child pornography usage on the Internet correlated with Internet addiction. While the study is not without limitations, it provides valuable information about those who are engaging in child pornography. The ultimate goal was to gain an understanding of those engaging in child pornography on the Internet, in order to prevent more children from falling victim of these predators.

Keywords: child pornography, pornography, addiction, Internet, child exploitation

1. INTRODUCTION

Though pornography, including child pornography, is not a new development, the consumption of the material has been on the rise with the growth of the Internet. The Internet provides people with a quick and relatively inexpensive way to access deviant materials, while keeping the individual feeling anonymous and with a sense of decreased legal risk (Akdeniz, 1997). In previous decades, materials would have to be sent through the postal system, or bought at a store (Adler, 2001). Those offenders are now moving to the Internet to find their materials, versus seeking them in a “real world” setting (Leary, 2010). The Internet has allowed a person to purchase, trade, download, or produce materials with the feeling of fewer societal or legal risks, than they would otherwise (Griffiths, 2000).
Child pornography, a United States term and criminal code, which is synonymous with the European terminology of “Child Abuse Materials”, has become a growing and significant problem in today’s society. Technological advances and innovations are becoming part of most people’s daily lives. The Internet allows for wide-spread dissemination of materials, whether it be educational, entertainment, or communication; however it also opens the doors for criminal activity to occur (Alexy, Burgess, & Baker, 2005). With this ease of access to technology, the ability to access, distribute, and obtain child pornography has rapidly increased (Adler, 2001).

Child pornography is seen as a wide-spread, increasing problem in modern day society (Schell, Martin, Hung & Tueda, 2007). The material is considered to be a multibillion dollar industry annually, which can be found on hundreds of thousands of websites daily (Ferraro & Casey, 2005). Though it is a highly illegal act, many people continually use the material and display addictive behaviors (Quayle & Taylor, 2003). A strong understanding of this deviant behavior and the ability to label those who are “addicted” will save many children from exploitation, as well as help the users of child pornography with their mental health.

The purpose of the current study was to explore whether one displays addictive behaviors toward the Internet and the seeking of child pornography. The usage of child pornography is a highly illegal activity; despite this fact, it is a continually growing society problem. This led to the research question of: Are those who are using child pornography also displaying addictive Internet behaviors? The researcher hypothesizes that those who self-report utilizing child pornography materials, will more likely be considered addicted to the Internet.

2. REVIEW OF LITERATURE

Whether one can become addicted to technology, including computers, the Internet, and the materials on the Internet, is a debatable topic. Some researchers pose that addictions to technology do exist, and should be treated similarly to that of substance abuse (Young & Rogers, 1998), while others say abuse on the Internet is an excessive usage problem, and indicates impulse control issues that one has, not necessarily an addiction (Beard 2005; Quayle, Vaughan, & Taylor, 2006; Shaffer, Hall, & Vander Bilt, 2000). Currently, addiction to technology or the Internet is not listed in the Diagnostic and Statistical Manual IV Text Revision (DSM-IV-TR), as a diagnostic disorder. Therefore, many researchers are hesitant to diagnose, and treat people for “Internet addiction.” Many will argue that there are no addictive characteristics, since it is not a chemical dependency; however, others state that the Internet is as addictive as substances, because it affects relationships, work, school, and a person’s well-being. Whether it is an “addiction” or just excessive usage, theorists do agree that the Internet can be problematic toward one’s life (Shaffer, Hall, & Vander Bilt, 2000). With technology and the Internet available being accessible virtually anywhere and at any time, it is not surprising that people are beginning to excessively use and abuse the technology.

With technology being so widely used, this opens the door for potential criminal activity to occur on the virtual means (Alexy, Burgess, and Baker, 2005). Pornography and child pornography are widespread on the Internet. There are hundreds of thousands of sites where one can seek the materials they desire (Acdniz, 1997; Griffiths, 2000). Though child pornography has been around for countless years, the vast amount of materials that is currently available on the Internet has led to the labeling of the “golden age of child pornography” (Adler, 2001, pg 234). Innumerable children have been and currently are being exploited and abused via the Internet, despite the laws protecting children. People view, collect, trade, produce and sell child pornographic images and videos online. Child pornography is a highly illegal, and concealed act, with many accessing the materials due to the anonymity, ease, and availability at any time or place, the Internet provides (Adler, 2001; Griffiths, 2000).

Child pornography on the Internet has been seen in all societies worldwide (Adler, 2001; Schell, Martin, Hung, & Rueda, 2007). Much research has been conducted on contact sex offenders, or an
offender who has engaged in sexual contact with a child; however, little is done to understand those who are involved with child pornography on the Internet (Webb, Craissai, & Keen, 2007). Measuring and understanding the true scope of the problem of child pornography on the Internet is a difficult task. “Despite the attention being paid to the online exploitation of children, the magnitude of the problem is still unknown” (O’Leary & Ovidio, 2007). The activity in and of itself is “largely clandestine and illegal,” (Carr & Hilton, 2009). Therefore, knowing exactly the amount of child pornography material on the Internet, as well as the amount of individuals accessing the materials and hunting for children to prey on, is a difficult undertaking. Authors have made claims that the child pornography is a multi-billion dollar industry, grossing anywhere from 1 to 5 billion dollars annually (Adler, 2001; Carr & Hilton, 2009; Griffith & Simon, 2008). Estimates state that there are over 100,000 child pornography websites operating at any given time (Griffith & Simon, 2008). For child pornography websites, as soon as existing sites are shut down by law enforcement, new sites containing the same or similar materials from the shutdown site are put on the new Internet sites rapidly (Ferraro & Casey, 2005). Constant innovation and ease of the Internet has led to what has been called a “virtual Pandora’s box of sexually explicit images” (Loftus, 2008). Understanding those who are engaging in child pornography online is a necessity to protect children from further exploitation and abuse.

3. METHODOLOGY

The main question of concern focused around whether one becomes addicted to the Internet. Does Internet addiction contribute to the individual becoming a user and consumer of child pornography, by producing, distributing, and trading the materials? The vast amount of child pornography available on the Internet, as well as the amount of time people are spending viewing the materials, despite the knowledge of legal implications, has made the understanding of user’s cognitions and behaviors a necessity.

The present study was a self-report survey. The survey was available through a secured link and advertised on various websites throughout the Internet, such as chats, forums, and social networking sites for a duration of three weeks. The survey was “advertised” in order to recruit individuals to take the survey. By placing the recruitment script and link on various chats, forums, and social networking sites, participants were able to decide whether or not they wished to participate. Participation was voluntary and there was no compensation for participating. The survey was anonymous and did not ask any personally identifying information, such as name. IP addresses were not collected. Findings presented are part of a larger study.

Basic demographic questions were asked first for all surveys. The participants were asked their gender, age, marital status, race, religion preference, country of residence, employment status, income range, highest level of education and highest degree obtainment. This was to gather data on the general population of those who were taking the survey. Internet Addiction Test (IAT) (Widyanto & Griffiths, 1996; Widyanto & McMurrnan, 2004; Young, 1998) was utilized to measure one’s addiction to the Internet and how it affects daily activity, such as daily routines, social life, sleep, feelings, and productivity with work and daily activities. The survey asked 20 various questions, and the participants could select: Does Not Apply, Rarely, Occasionally, Frequently, Often or Always. The participants self-reported through the Online Pornography Survey (OPS) (Seigfreid, Lovely, & Rogers, 2008), whether or not they have ever accessed or viewed child pornographic materials on the Internet. Based on previous literature, if the respondent reported that they have knowingly searched for pornographic materials, accessed a pornographic website, knowingly downloaded pornographic materials, or knowing exchanged or shared pornographic materials involving children under the age of 18, the respondent was considered a child pornography user (Seigfreid, Lovely, & Rogers, 2008).
4. RESULTS

The survey was completed a total of 144 times. Out of the total 144 responses, 118 reported never viewing child pornography, while 26 reported viewing the materials; therefore were classified as “child pornography users”, based on their responses on the Online Child Pornography Survey (OPS). Of the 144 (n = 144) respondents, 26 (18.1%) were classified as child pornography users, and 118 (81.9%) were classified as non-users. Nearly 20% of the respondents have accessed child pornography materials at some point in their past. As shown in Table 2, respondents, 26 (18.1%) of the total respondents were male, and 43 (29.9%) were female. Of the 26 respondents whom were classified as child pornography users, 100% were males. This means 25.7% of the male respondents have knowingly viewed child pornography materials.

Table 1 Demographics: Personal Variables in CP Users and Non-CP Users

<table>
<thead>
<tr>
<th>Frequency (Percentages)</th>
<th>Child Pornography Users</th>
<th>Non-Child Pornography Users</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>26 (100%)</td>
<td>75 (63.6%)</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>0 (0.0%)</td>
<td>43 (36.4%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>26 (18.1%)</td>
<td>118 (81.9%)</td>
</tr>
</tbody>
</table>

As shown in Table 2, respondents were asked to report their hours spent online. Half of the child pornography users (13 respondents) reported spending more than 21 hours online per week. There were 6 (23.1%) respondents who reported 16-20 hours online per week. The remaining 7 (26.9%) respondents reported less than 15 hours online per week. Of the non-pornography users, 55 (46.6%) respondents reported spending more than 21 hours online per week. There were 18 (15.3%) respondents who reported 16-20 hours online weekly, 22 (18.6%) reported 11-15 hours online weekly, 19 (16.1%) reported 6-10 hours online weekly, and finally, 4 (3.4%) reported 1-5 hours online per week. Out of the 144 total responses, nearly half, 68 (47.2%) reported using the Internet 21 hours or more per week. There were 24 (16.6%) who reported using the Internet between 16-20 hours per week, 25 (17.4%) who reported using the Internet 11-15 hours per week, 22 (15.3%) who reported using the Internet 6-10 hours per week, and finally, 5 (3.5%) who reported using the Internet 1-5 hours per week.
Table 2 Measurements of Achievement and Activity Variables in CP Users and Non-CP Users

<table>
<thead>
<tr>
<th>Hours Online</th>
<th>Child Pornography Users</th>
<th>Non-Child Pornography Users</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5 Hours</td>
<td>1 (3.9%)</td>
<td>4 (3.4%)</td>
<td>5 (3.5%)</td>
</tr>
<tr>
<td>6 - 10 Hours</td>
<td>3 (11.5%)</td>
<td>19 (16.1%)</td>
<td>22 (15.3%)</td>
</tr>
<tr>
<td>11 - 15 Hours</td>
<td>3 (11.5%)</td>
<td>22 (18.6%)</td>
<td>25 (17.4%)</td>
</tr>
<tr>
<td>16 - 20 Hours</td>
<td>6 (23.1%)</td>
<td>18 (15.3%)</td>
<td>24 (16.6%)</td>
</tr>
<tr>
<td>More than 21 Hours</td>
<td>13 (50.0%)</td>
<td>55 (46.6%)</td>
<td>68 (47.2%)</td>
</tr>
<tr>
<td>Total</td>
<td>26 (18.1%)</td>
<td>118 (81.9%)</td>
<td>144 (100%)</td>
</tr>
</tbody>
</table>

A number of frequency tests were run in order to see the differences between the child pornography users, and the non-child pornography users. Using the Internet Addiction Test (Widyanto & Griffiths, 2006; ), participants were labeled as normal, mild, moderate or extreme users of the Internet based off of their score on this test. The 20 item test, was self-report, where participants ranked themselves on a Likert-type scale, to questions covering how much the Internet affects their daily life. Based on their scores, respondents were labeled as normal, mild addiction, moderate addiction, and severe addiction.

Table 3 Frequency of Internet Addictions in Child Pornography Users versus Non-Child Pornography Users

<table>
<thead>
<tr>
<th>Frequency (Percentages)</th>
<th>Child Pornography Users</th>
<th>Non-Child Pornography Users</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>11 (42.3%)</td>
<td>69 (58.5%)</td>
<td>80 (55.6%)</td>
</tr>
<tr>
<td>Mild</td>
<td>9 (34.6%)</td>
<td>42 (35.6%)</td>
<td>51 (35.4%)</td>
</tr>
<tr>
<td>Moderate</td>
<td>5 (19.2%)</td>
<td>7 (5.9%)</td>
<td>12 (8.3%)</td>
</tr>
<tr>
<td>Extreme</td>
<td>1 (3.8%)</td>
<td>0 (0%)</td>
<td>1 (0.69%)</td>
</tr>
<tr>
<td>Total</td>
<td>26 (18.1%)</td>
<td>118 (81.9%)</td>
<td>144 (100%)</td>
</tr>
</tbody>
</table>

Based off of the above classification, the authors wanted to explore the frequency of Internet addictions within the groups of child pornography users, non-child pornography users, and the total of respondents. As shown in Table 3, of the child pornography users, 11 (42.3%) were considered to be at the normal level of Internet usage. Of the non-child pornography users, 69, or 58.8%, reported a normal level of Internet usage. 9 (34.6%) of the child pornography users were considered to display mild Internet addiction, 5 (19.2%) were considered to have a moderate level of Internet addiction, and 1 (3.8%) had severe addiction to the Internet. For the non-child pornography users, 42 (35.6%) were considered mild Internet addicts, and 7 (5.9%) were considered to be moderate addicts. None of the non-child pornography respondents reported severe Internet addictions.

More than half (57.6%) of the child pornography users reported some form of Internet addiction (mild, moderate or extreme). The reverse was true for non-child pornography users, where more than half of the non-child pornography respondents (58.5%) reported normal level of Internet usage.
Table 4 T-Test Results for Internet Addiction: Child Pornography Users versus Non-Child Pornography Users

<table>
<thead>
<tr>
<th></th>
<th>CP users</th>
<th>Non CP users</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Diff.</th>
<th>Std. Error Diff.</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>20.45</td>
<td>10.15</td>
<td>22.16</td>
<td>6.61</td>
<td>1.70</td>
<td>3.16</td>
<td>11.37</td>
<td>0.54</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Addicts</td>
<td>50.87</td>
<td>17.76</td>
<td>39.92</td>
<td>8.69</td>
<td>-10.95</td>
<td>4.75</td>
<td>16.14</td>
<td>-2.30</td>
<td>0.035*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAT Total</td>
<td>38.00</td>
<td>21.28</td>
<td>29.38</td>
<td>11.53</td>
<td>-8.62</td>
<td>4.31</td>
<td>28.31</td>
<td>-2.00</td>
<td>0.05*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05

Nearly a quarter (24%) of the child pornography respondents reported moderate to extreme Internet addiction, whereas, only 5.9% of the non-child pornography respondents reported moderate to extreme Internet addiction. This supported the author’s prediction that child pornography users would tend to display Internet addictive characteristics.

An independent T-test was run in order to determine if normal Internet usage, Internet addiction, and total Internet usage scores proved to be significantly different between child pornography users and non-child pornography users. Internet addiction was significantly higher in child pornography users than non-child pornography users ($M = 50.87$ for child pornography users, and $M = 39.92$ for non-child pornography users; $t(16.14) = -2.30, p < .05$). In other words, Internet addiction was significantly different between child pornography users and non-child pornography users.

Table 5 Crosstabs of Hours Spent Online by Child Pornography Users

<table>
<thead>
<tr>
<th>Frequency (Percentages)</th>
<th>Normal</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 hours</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1 (3.8%)</td>
</tr>
<tr>
<td>6-10 hours</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3 (11.5%)</td>
</tr>
<tr>
<td>11-15 hours</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3 (11.5%)</td>
</tr>
<tr>
<td>16-20 hours</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>6 (23.1%)</td>
</tr>
<tr>
<td>20+ hours</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>13 (50%)</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>9</td>
<td>5</td>
<td>1</td>
<td>26 (100%)</td>
</tr>
</tbody>
</table>

In addition, Internet Addiction Test total scores were significantly different between child pornography users and non-child pornography users ($M = 38.00$ for child pornography users vs. $M = 29.38$ for non-child pornography users, respectively; $t(28.31) = -2.00, p < .05$). Normal Internet usage level was not significantly different between the two groups.
5. DISCUSSION

The current study sought to understand the relationship between Internet addiction and child pornography usage. As stated prior, 26 respondents were considered child pornography users. This made up 18.1% of the total respondents population. This is an interesting statistic, as nearly 1 in 5 respondents for this study were child pornography users. This supports that child pornography usage is highly used and continually increasing with further development and spread of the Internet.

The findings in regards to the Internet Addiction Test supports the authors original hypothesis, that child pornography users are more likely to be addicted to the Internet. There was a statistically significant difference between the two groups excessive usage of the Internet. Child pornography users displayed more excessive usage of the Internet, than did non-child pornography users. An explanation for excessive use of the Internet of child pornography users could be that they are avoiding negative feelings of possible co-morbid disorders, such as obsessions, by returning to the Internet to access the child pornographic materials (Quayle, Vaughan, & Taylor, 2006). Though it was not analyzed for the current study, co-morbid disorders play an important roll into the cognitions and online patterns of child pornography usage. Child pornography users showed a statistical difference from non-child pornography users with their Internet usage. Therefore, it shows that they are displaying far more preoccupation with spending time on the Internet.

6. LIMITATIONS

The current study is not without limitations. Though the selection of forums, chat rooms and social networking sites where the survey was advertised was randomized, the population is not a true random sample; rather it was a convenience sample. Selections of sites to use were done based on Google searches, thus was considered to be more of a convenience sample, rather than a true random sample. Respondents decided if they wished to participate in the study, thus voluntary bias may have been present. As well, only those who visited the sites where the study was advertised had the opportunity to take the survey. For these reasons, the study is not claiming to be representative of the general population at large on the Internet, and results should be interpreted with caution.

The sample of the child pornographers was rather small. Had the sample size been larger, findings may have been significantly altered. In regards to the survey itself, respondents may have misrepresented themselves, and not answered all questions with complete honesty. The questions which ask about morality, as well as those asking about illegal and socially stigmatizing activities, may have “intimidated” the respondent, causing them to not answer honestly. Though the survey was anonymous and did not ask any personal identifying information, the respondents may have been hesitant to be completely truthful for those questions, thus misrepresenting themselves. Respondents may have wanted to represent themselves in a positive light, rather than being completely truthful.

Future research should seek a larger sample size. Finding participants to disclose their child pornography behaviors could be a challenging task, due to the clandestine nature. This data, however, could give a better understanding of who the child pornographers are, and their behaviors. Furthermore, future research should aim at creating a more random sample, in order to gain generalizability. While this is a dark topic, focusing on those who engage in a rather clandestine activity, there is a need to understand the behaviors in order to adjudicate and prevent future exploitation.

7. CONCLUSION

With technology and the Internet being made available at the fingertips of virtually every individual, deviant behavior on the Internet is on the rise. A strong understand of the deviant behavior is a must. Child pornography is widely available on the Internet, despite the legal implications. The rapid growth and increase in monetary profits for those producing the materials has led to researchers labeling this
epidemic as the “golden age of child pornography” (Adler, 2001, pg 234). Despite the growing problem, little is known about whom the users are and to what they are becoming addicted. The current study analyzed who are the users of child pornography, and whether they can be considered Internet addicts. There were statistically significant findings, and the study proved to be effective in measuring addictive behaviors towards the Internet and child pornography consumption. Future research should aim at studying more in depth the addictive components of those who use child pornography, such as those who have been convicted of child pornography usage crimes. Child pornography usage will likely to continue to increase, as technology and the Internet continues to develop. The ability to understand the users will prove to be beneficial to the general population, law enforcement, and most importantly, the children who will be saved or prevented from being a victim of this terrible crime.

REFERENCES


