YOUTH POPULATIONS WITH AN ABUSE HISTORY AND THEIR

EXPOSURE TO SEXUAL MATERIALS ONLINE

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BY

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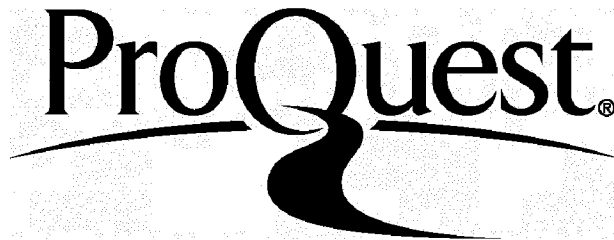Chicago, IL   March 2015

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Abstract

The aim of this study was to explore the relationship between a history of abuse and exposure to unwanted sexual materials and solicitation online. Specifically, this study assessed the association between an abuse or trauma history and experiences of online solicitation among youth. Also, analysis included examining whether males or females with a history of abuse had higher rates of online exploitation. Archival data from the Youth Internet Safety Survey (YISS) 1, conducted in the year 2000, and YISS 2, conducted in the year 2005, were analyzed to determine if there was an association a trauma or abuse history and sexual solicitation online. For YISS-1, from a total sample of 1,501 youth, there were 119 youth who reported online sexual solicitation in the past year and 12 who identified a history of sexual abuse in the past year. For YISS-2, from a total sample size of 1,500, there were 105 youth who reported online sexual solicitation in the past year and 20 who identified a history of sexual abuse in the past year. Analysis of this data indicated an association between abuse history and sexual solicitation online. In both samples, children who reported a history of sexual abuse were more likely to report online sexual solicitation ($x^2(1) = 18.96$, $p < 0.001$; $x^2(1) = 57.34$, $p < 0.001$). Although statistically significant, both of these associations were weak ($\varphi = 0.113$, $p < .001$; $\varphi = 0.196$, $p =< .001$). Due to the small sample size of youth who reported a history of abuse and the results should be interpreted with caution. In addition, for both years 2000 and 2005,

there were no significant differences found between male and female youth with a reported abuse history and their sexual solicitation online ($x^2(1) = 0.78$, $p = .38$; $x^2(1) = 2.40$, $p = .12$). It is important for professionals to learn if a history of abuse will carry over into an online world and potentially re-traumatize young individuals. This information would have implications for how the mental health community develops intervention strategies and education programs.

Acknowledgements

There are so many people who contributed to the final realization of this learning journey. At the start of the journey, I focused on my goal to inspire others to find their voice. At this moment, I realize it is the people I've encountered who have helped me on this journey and have allowed my voice to grow stronger. To all the faculty members who have inspired and challenged me every step away to continue to develop into the professional voice I strive to contribute to the community. To Dr. Cox, who had stood by me from the first class of graduate school to reaching the finish line, I thank you. Without your continued support and belief in my abilities, I never would have been able to reach my educational goals. To Dr. Dyson, and Dr. Alvarez, I thank you for your willingness to be a part of this process, your interest in my work, and your contributions to me being a well-rounded and proactive professional.

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words, you inspire me to do the work and find the words I need. To my mother, who is always willing to hold my hand; even when I need moments to walk alone, I know that you are always waiting for me to take your hand once again. As we have journeyed together, you've let me embrace the parts of my self which define me: the weaknesses and the strengths. You are always willing to listen as I voiced my joys, frustrations, sadness, playfulness and hopefulness. You've walked this journey as much as I have. My parents, you've inspired my whole person, my voice. There isn't a day which goes by where you are not a part of me.

To everyone from the past, present, and future, who has given me words, and to my own self, I promise to be an instrument for these words.

Christine Marie Widuger

Curriculum Vitae

Christine M. Widuger

EDUCATION

The Adler School of Professional Psychology
Doctor of Psychology: Clinical Psychology   2015
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Loyola University Chicago   2007
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PROFESSIONAL EXPERIENCE

Family Adolescent Child Treatment Service   *Sept. 2012 – current*
Therapist

Looking Glass Friends Entertainment   *2009- current*
Owner, children's entertainment performer

Alexian Brothers Behavioral Health Hospital   *Oct 2012-Aug 2013*
Resource Therapist- Child Partial Hospitalization Program

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Doctoral Intern

Family Adolescent Child Treatment Service   *July 2010-July 2011*
Advanced Practicum Extern

Innovations in Learning   *Aug 2009- June 2010*
Therapy Practicum Extern

Advocate Illinois Masonic Medical Center,   *July 2008- June 2009*
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Lincoln Park Public Library *June 2008*
Parent Training Class

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Widuger, C. & Kochman, S. (2008, June) *Cyberbullying.* Presentation conducted from Chicago Safe Start, Chicago, IL. June 2008

Widuger, C. (2008, April). *The Evaluation of Chicago Young Women's Lives.* Poster Presentation at the Community Service Practicum Fair at Adler University, Chicago, IL.

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Magis Scholar: Honors in service learning and community engagement

Thomas M. Kennedy Award from Loyola University Chicago Psychology Department

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Chapter I: Introduction

General Introductory Statement

The Internet is a form of communication in today's society. It is apparent that this is especially true for youth populations, as the use of electronic devices and social media are a method for communication and social interaction (Spada, 2014). However, there is limited research as to the impact of Internet usage and how clinical youth populations are utilizing the Internet as a form of communication (Spada, 2014). While the Internet is a luxury and adds to the ease of communicating with others, there are still many risks that are associated with this newfound dependence on the Internet as a form of communication (Ybarra & Mitchell, 2005). Younger populations are becoming more proficient in their use of technology and often are more knowledgeable about Internet usage than their older family members (Spada, 2014). The use of Instant Messaging programs, chat rooms, and social networking pages allow for an exchange of information between parties without face-to-face contact. Youth use the Internet as a means of socialization with people who they may have never met face-to-face. Internet has become so popular in American culture that it is difficult to imagine a lifestyle without it. While the Internet has many positive uses, this technology has opened a window to more negative repercussions as well.

The Internet, as a form of social contact, has created new opportunities for the solicitation of youth populations and their exposure to unwanted sexual

materials (Ybarra & Mitchell, 2005). Now people can be whomever they want to be online and come in contact with more people than ever before. As Internet usage among youth populations becomes a more prevalent form of social communication, there is an increased need for information regarding the potential risks that may be related to victimization of youth. It is possible that there are specific risk factors and characteristics of some youth that place them at a higher rate of exposure to sexual materials and solicitation online (Ybarra & Mitchell, 2005). Identification of potential risk factors can be beneficial to the mental health community.

The number of Internet users overall is approximately two and half billion (Spada, 2014). In the United States, over 80% of the entire population has access to the Internet (Spada, 2014). Internet can be accessed on more devices that ever before. A majority of these Internet users are the youth populations. A national phone survey of 8 – 18-year-olds was completed in 2009 and found that adolescents, on average, were using some type of media approximately 7.5 hours a day, with more than 25% of that time spent "media multi-tasking" (Brown & Bobkowski, 2011). All the time spent on media contributed to close to 11 hours a day (Brown & Bobkowski, 2011). These hours accumulate to more than the average adult would have time to fit in a typical day.

In 2007, approximately 59% of adolescents had their own computer, with two thirds having access to high speed Internet at home (Brown & Bobkowski,

2011). This number is only expected to increase with time. Females still primarily use the Internet and mobile devices for communication purposes. Female youth will utilize instant messaging, social networking sites, text messages, and email to stay connected and maintain relationships. Male youth predominantly access the Internet to engage in video gaming activities.

Most of the studies conducted thus far that address youth exposure to sexual solicitation and exposure online focus on the youth's experience after the event has occurred (Mitchell, Wolak, & Finklehor, 2008). The symptoms displayed by youth after the event are most often associated with trauma and depressive symptoms. Yet, the studies assess whether the experience of abuse places a youth at a higher likelihood for exposure to unwanted sexual materials (Wells & Mitchell, 2007). It is important for professionals who work with youth to learn how a history of abuse impacts a youth's online communication and whether these young adults are more vulnerable to experiencing re-traumatization. The aim of this study is to address whether or not a history of abuse is associated with higher rates of exposure to unwanted sexual materials and solicitation online.

There are also implications as to whether males or females will have higher rates of exploitation in relation to a history of abuse. Males and females present symptoms, related to exposure to abuse, differently which may impact ´ their rates of online exposure to sexual materials (Peter, Valkenburg, & Shouten, 2006). If females tend to internalize their emotions related to a traumatic event,

then perhaps they are more likely to seek social communication through an online source. Their emotions and symptoms may place them at a higher need for seeking out relationships which offer attention, love, and support (Brown, 2005). Males tend to externalize their emotions related to a traumatic event, so it would be beneficial to note if these emotions translate as a potential online victim (Wells & Mitchell, 2007). Mental health professionals should be aware of any similarities or differences between the genders as it relates to in-person versus online communication and relationships.

This information would have implications for how the mental health community develops intervention strategies and education programs. While there have been greater advances in the need of educational programs for Internet safety, there has not been a focus on youth who may be at a higher risk (Mitchell et al., 2008). When youth individuals are assessed for safety, there tends to be a focus on physical or psychological safety. Yet, Internet safety does not seem to be as prominent when developing educational programs or interventions as it relates to mental health. Internet safety may take on a higher priority and become more important in the assessment of young clients who exhibit symptoms related to a history of abuse. Youth with a history of abuse may be at a higher risk of online solicitation and exposure to sexual materials (Wells & Mitchell, 2007). Re-traumatization may occur through the online format, which could greatly

impact youth's ability to cope with their symptoms as well as their psychological development.

Statement of the Problem

Currently, it is difficult to find research that addresses any potential relationship between the abuse history of youth and their rates of exposure to unwanted sexual materials or solicitation online. The research is primarily focused on parental awareness of Internet usage, youth's knowledge of the Internet, and reactions to sexual materials online (Mitchell et al., 2008). It is unknown if there are potential risk factors for youth which would make them more likely to be exposed to online sexual materials. Specifically, there is little information if past trauma precedes higher rates of online exposure to sexual materials and/or solicitation. At times, it seems that the exposure to unwanted solicitation or sexual materials online is a traumatic event in itself (Mitchell et al., 2008). This would be an important risk factor to identify as there would be a possibility of increasing the severity of symptoms shown by youth with an abuse history or a risk for re-traumatization.

Based upon the current literature of this topic, it would seem likely that the typical symptoms and resulting behaviors exhibited by youth with a trauma abuse history would make them more likely to seek out online interactions and relationships (Peter et al., 2006). This need for support and interaction can make youth more susceptible to being taken advantage of by perpetrators who expose

minors to sexual materials. There is also a concern as to which gender would be more likely at risk for being exposed to unwanted sexual materials. The literature suggests that either gender could be at risk for solicitation. Male populations tend to engage in more social media websites, while females tend to be a more likely victim of sexual solicitation from perpetrators (Peter et al., 2006). It would be important for additional research to be conducted in this area as prior research has not specifically addressed online usage in this matter and more traditional solicitation may not carry over into an online world.

Statement of the Purpose

It is important to understand if there is a relationship between trauma histories and exposure to sexual materials online. Young people may experience trauma for the first time through online exposure to sexual materials, but those with trauma history could be placed at a higher risk for exposure. The purpose of this study is to understand the association between a reported abuse history and the experience of sexual solicitation and/or exposure to unwanted sexual materials in an online context. There is a higher level of risk for youth populations to be re-traumatized by experiencing sexual solicitation or exposure to unwanted sexual materials (Mitchell et al., 2008).

This potential risk factor is important to note when establishing treatment and safety plans for youth. In the mental health field, it is common practice to develop treatment plans that specifically address social interactions. Since the

Internet is normalized into the current American youth culture, there is a greater need to monitor Internet usage and communications online for youth who have a history of abuse (Spada, 2014). The characteristics that are associated with high-risk victims of sexual materials online are similar to the symptoms displayed by youth who have experienced a trauma such as physical or sexual abuse (Brown, 2005). It is important for professionals, who have frequent contact with youth populations, to be aware of potential risk factors which may hinder a child's development or expose the child to additional trauma experiences. Examining this relationship is critical for the youth who are not yet receiving clinical services and can be identified as individuals in need of additional support.

Assumptions and Limitations

For this study, it is assumed that there will be a relationship between a youth's history of abuse and sexual solicitation online. Given a youth's stage in development, symptomology, and patterns of abuse/trauma, it would seem likely that a youth with an abuse history would be placed at a higher level of risk than youth who do not report an abuse history. It is also assumed that female youth would be more likely to be sexually solicited online, than male youth. This assumption would be consistent with traditional expectations of male versus female victims of sexualized crimes.

There are some limitations with the sample that is used for this study, which need to be taken into consideration. While the sample is not representative

of all youth within the United States, it is representative of youth who use the Internet. This is due to the fact that Internet usage is not evenly distributed throughout the population. Factors that can contribute to Internet access and usage can be a population's geographic location, education, and socioeconomic status (Spada, 2014).

Also, the first set of data was collected between August 1999 and February 2000 and the second set of data was collected during March to June 2005. Internet usage has increased in frequency and access which could lead to higher rates of exposure to sexual materials online. Additionally, youth participants did not always have the opportunity to elaborate on their experiences related to physical or sexual abuse. Due to the structure of the data collection participants may not have identified all modalities of abuse. Participants may have also been hesitant to share details of their experience related to their abuse histories or exposure to sexual materials online. The details pertaining to these experiences may be underrepresented when compared to the larger and more diverse sample size. However, as this data have not been previously analyzed to explore relationships between trauma history and online sexual solicitation, the results may contribute to a more thorough understanding of this relationship.

Research Questions

This study examined archival data to assess for an association between youth participants reporting a history of abuse and exposure to unwanted sexual

materials and/or solicitation online. The data were also evaluated between male and female participants with an abuse history to identify any gender specific trends in the relationship. As there is research in this area, the study's findings could have implications for clinical and preventive interventions. It is important for mental health professionals to learn if a history of abuse will carry over into an online world and potentially re-traumatize youth individuals. This study will address the following research questions:

1. Is there an association between abuse/trauma experience and online sexual solicitation among youth?

2. Are females, who report an abuse history, more likely to experience online sexual solicitation than males, who report an abuse history?

Chapter II: Review of Literature

Socialization of youth within an online format is an ever growing area of

interest. This literature review will provide a brief description of youth

populations, perpetrators of sexual solicitation, and Internet usage. This

information will also describe the typical online usage of youth and how the level

of usage can place susceptible youth at a higher level of risk to fall victim to

online perpetrators. Current literature exploring the relationship between having

an abuse history and experiences of sexual solicitation is extremely limited.

Internet Use among Youth

Youth between the ages of 12 to 24 years old are the largest population

using the Internet as a means of communication (Leander, Christianson &

Granhag, 2008). There are estimates that up to 90% or more youth between the

ages of 12 to 18 have access to the Internet (Ybarra & Mitchell, 2005). These

numbers should continue to increase over time. This can be exemplified as the

number of teens using the Internet jumped from 56% to 87% between the years

2000 and 2005 (Wells & Mitchell, 2007). As time and technology continues to

move forward, the percentage of youth who do not have access to the Internet will

continue to decrease. With the majority of youth having access to the Internet, the

potential consequences of this access, will have greater impact.

Internet access has fluctuated over time. The different modalities in which

a youth can access the Internet has greatly increased. The days of having access

only on a computer are long gone. Current research suggests that 95% of 12–17

year olds in the U.S. have access to the Internet, with 74% having mobile access,

such as a smart phone or tablet (Livingstone & Smith, 2014). Approximately

25% of these youth access Internet from a mobile device. In review, the number

of youth accessing the Internet from a mobile device, 31% of 9–10 year olds and

69% of 11–14 year olds have a mobile device, and 71% of 12– 13 year olds and

76% of 14–17 year olds have access to a mobile device or tablet which is used to

access to Internet (Livingstone & Smith, 2014).

When it comes to cell phones, 75% of adolescents have their own cell

phone (Rice et al., 2014). Older youth have a greater access to mobile devices

with 83% of 17-year-olds compared to 58% of 12-year-olds. Of those adolescents

with cell phones, 27–37% of adolescents report they use it to access the Internet

(Rice et al., 2014). To obtain more private access to the Internet, nearly one

fourth of the youth population use the Internet exclusively from their phone. In

this way they almost always have access to the Internet without the supervision of

an adult (Rice et al., 2014). Smart phones and mobile devices, are starting to

replace the frequency of use on computers.

It is important to note how accessible the Internet is. The Internet is not

only accessible by computers but other mobile electronic devices. Electronic

devices which can be used almost anywhere. These devices are less likely to be

under the supervision of parental/adult figures. Research has found that among

the youth accessing the Internet, ages 9–16 years old, 87% access the Internet at home, 49% of them can access Internet privately in their bedroom, and 33% utilize a mobile device (Livingstone & Smith, 2014). Youth use the Internet as a form of social networking through the use of instant messaging, bulletin board, chat rooms, online profiles and blogs (Subrahmanyam & Lin, 2007). These online programs can be used by adolescent populations to explore "typical adolescent issues such as sexuality, identity, and partner selection" (Subrahmanyam & Lin, 2007, p. 660).

Given that Internet is well integrated into the lifestyle of youth, the actual Internet usage can vary greatly between different genders. This may also impact the level of risk at which youth can be put in. The time spent in chatrooms, online browsing, and games were found to be "related to higher levels of social anxiety and less mature identity statuses" among young adult males but not females (Subrahmanyam & Lin, 2007, p. 661). Male youth are responsible for higher rates of Internet usage, which could be due to participation in online games.

Wells and Mitchell (2007) examined the characteristics of youth who were victims of online sexual exploitation and abuse compared with those who experienced another Internet-related problem, as well as in relation to the presence of a DSM-IV diagnosis and gender differences. The information for the study was gathered directly from mental health professionals who indicated that they had worked with a client in the past 5 years, who had reported problematic

Internet experiences, such as: online pornography; sexual solicitation; romantic, sexual, or close relationships; victim of fraud; received racist or violent material, etc. (Wells & Mitchell, 2007). The participants were collected through a random sample of names and addresses, which were obtained from professional organization membership lists in the fields of social work, psychiatry, and psychology. The researchers mailed a cover letter and a one-page survey in which the participant could indicate if they had worked with such a client and if they would consent to being contacted for a detailed follow-up survey. This resulted in 7,841 valid responses to phase 1, including 7,232 who had treated a person who met the criteria in the past 5 years. Of that sample, the researchers received a total of 1,441 cases of clients in Phase 2, who had experienced a problematic Internet experience, with a total of 512 cases involving youth under the age of 17 (Wells & Mitchell, 2007).

The demographic characteristics of the 512 mental health professionals who were interviewed included: 58% females, 79% over 40 years old, and 95% of European-American decent (Wells & Mitchell, 2007). There were 45% participants who had earned a Master's degree and 37% who had a Ph.D., with 38% identifying as psychologists and 20% as social workers (Wells & Mitchell, 2007). The clinicians completed an 11-category inventory of problematic Internet experiences, based on the Survey of Internet Mental Health Issues (SIMHI). The

interviewers also collected data pertaining to DSM-IV diagnoses and other mental health concerns that were present during treatment.

Results of the study indicated that the youth who received the various forms of problematic Internet experiences were composed of 57% males and 43% females, with a mean age of 14.28 years old (Wells & Mitchell, 2007). 91% of the clients were European-American, 92% attended school, and 92% lived with at least one of their parents. Of these participants, 26% of the youth has experienced online sexual exploitation, with 77% of them being female. 58% of all youth in the study and 61% of sexual exploitation victims had current DSM-IV diagnoses, with mood disorders being the most common (mostly depressive disorder but some bipolar disorder). Victims of sexual exploitation were significantly more likely to have both current and lifetime diagnoses of post-traumatic stress disorder (Wells & Mitchell, 2007). Moreover, females who experienced sexual exploitation were more likely to have mental health issues involving somatic complaints, insomnia, and conflict with their parents, while male victims were more likely to have problems resulting from mental illness, drug or alcohol use, and grief. Furthermore, both genders exhibited problems stemming from running away from home, sexual victimization, and sexual acting out (Wells & Mitchell, 2007).

Despite a large difference in Internet usage, females are still more likely to be solicited online than males (Wells & Mitchell, 2007). While adolescent

females value interpersonal communication and spend more time than males with online forms of communication, Peter, Valkenburg, and Shouten (2006) found there was no gender difference in relation to who might communicate more often with strangers online. The interaction with strangers increases the potential for risk and sexual solicitation online.

In terms of gender differences and sexuality online, males tend to communicate more explicitly about sex related topics, while females are more likely to communicate implicitly (Subrahmanyam, Smahel & Greenfield, 2006). Adolescent females can implicitly communicate sexualized themes through the use of sexualized nicknames known to attract males online (Subrahmanyam et al., 2006). Traditional gender roles tend to carry over into the online world. Males tend to be more active while females tend to be more passive in the use of sexual themes. The pattern of male and female behaviors may emulate the real world social norms in which, compared to males, females are expected to be more indirect in their sexual expression" (Subrahmanyam et al., 2006, p 404).

In a literature review, studies have shown that boys were a little more likely than girls to have viewed sexual images online and to receive sexual messages (Livingstone & Smith, 2014). This may reflect more socially acceptable norms that approve of boys' engagement with pornography more so than girls' or it could be due to boys engaging in more risky online activities. Analysis of online content has discovered that females are more than likely than

males to post personal information on social networking sites. The disclosure of personal information, such as gender and age, can place females at a higher risk for online sexual solicitation. Surprisingly, most youth are able to identify the risks related to posting personal information online but feel it is unlikely to happen to them.

Adolescent and youth populations are at a pivotal stage in their development, as they are faced not only with many physical and interpersonal changes, but are also seeking increased autonomy (Subrahmanyam & Lin, 2007). Research has found that adolescents use mass media to learn about important aspects of their development, namely sex and gender (Subrahmanyam et al., 2006). People who participate in online environments do not need to exchange accurate information regarding each other's bodies such as age, race, gender, physical appearance, and physical attractiveness (Subrahmanyam et al., 2006). Information about the body is a common topic when sexual conversations and partner relationships are discussed online by adolescents (Subrahmanyam et al., 2006).

Sexual identity is one area of the identity formation process. Adolescents are also more likely to explore their sexual identity with their peers and in an online setting. As adolescents continue to develop, there is an increase in sexual concerns and sexual involvement (Subrahmanyam et al., 2006). Studies have found that there is twice as much interest in sexual health bulletin boards than in a

general teen issues online board (Subrahmanyam et al., 2006). Adolescents can learn and explore their sexuality by participating in virtual dating, cybersex, and discussions with others (Subrahmanyam et al., 2006). Research has estimated that there is a rate of one sexual comment ever four minutes in a teen chat room (Subrahmanyam et al., 2006). One study found that 16% of their participants, between the ages of 12-20 years old, had tried virtual sex on the Internet (Subrahmanyam et al., 2006).

Subrahmanyam, Smahel, and Greenfield (2006) conducted a study to analyze adolescents' presentation of identity and sexuality in online chat rooms, both those that were monitored and those that were not. Data was collected from 38 chat sessions that occurred between April 14 and June 1, 2003. Conversations from both monitored and unmonitored chat rooms were recorded during the same time 30-minute time window, occurring sometime from 12-9 p.m. Pacific Standard Time, on both weekdays and weekend days. During each 30-minute window, a silent observer pasted 15 pages of activity into a Word document. From the larger sample of 38 sessions, 10 were selected from each group that occurred on the same day of the week and around the same time of day (within 20 minutes) (Subrahmanyam et al., 2006).

The resulting 20 sessions included: 583 nicknames and 6702 utterances in Chat Service 1 (monitored) and 567 nicknames and 5556 utterances in Chat Service 2 (unmonitored). Two undergraduate students coded both the utterances

and the nicknames present during the conversations and were blind to the nicknames while coding the utterances and vice versa while coding the nicknames. Utterances were coded for presence of identifying information and specific developmental themes (identity presentation and sexual exploration) and were categorized as either nonsexual or sexual, with the sexual responses also being coded as implicitly sexual or explicitly sexual, as well as for the presence of obscenities. Nicknames were also coded for nonsexual or sexual, as well as for implicitly or explicitly sexual. Nicknames were also categorized into masculine, feminine, or gender-neutral (Subrahmanyam et al., 2006).

As this was not a formal study, there were no recruitment of the participants and no measures utilized. Results of the study indicated that the majority of the participants shared some type of identifying information, usually their gender. 19% of all of the nicknames were sexualized in nature, while 28% of all participants made utterances with sexual themes, with a frequency of one sexual comment occurring every minute and one obscenity every 2 minutes (Subrahmanyam et al., 2006). Results also indicate that females more often communicated sexuality implicitly, whereas males did so explicitly. Furthermore, there were significantly less explicit sexual utterances and obscenity present in the monitored chat rooms than in the unmonitored ones (Subrahmanyam et al., 2006).

The Internet has become engrained in the social lives of adolescents. Subrahmanyam & Lin (2007) examined the relationships between adolescents'

Internet use, communication, feelings of loneliness, and perceived support from others. In the study, there were a total of 192 participants between the ages of 12.8 to 18.4; however, the researchers chose to analyze just the data from the respondents between the ages of 15 to 18.4 (Subrahmanyam & Lin, 2007). This resulted in a total of 156 participants with a mean age of 16.5. This included an even number of males and females (N=78) who were ethnically diverse, with 40.4% White, 35.9% Asian (Asian, Asian-Indian, and Pacific Islander), 15.4% Latino/Hispanic (not White), 1.9% African American, and 6.4% Other (Subrahmanyam & Lin, 2007).

The participants were selected from a large private high school located in the San Gabriel Valley of Los Angeles County in California (Subrahmanyam & Lin, 2007). The students received the measures, along with an informed consent and assent form, from their teachers and completed them during class time, for approximately 30-45 minutes. The measures included an Internet access questionnaire developed by the researchers, the Roberts Revision of the UCLA Loneliness Scale (RULS), and the Social Support Scale for Children (SSS-C) (Subrahmanyam & Lin, 2007). Participants remained anonymous and no identifying information was collected.

While the internet access questionnaire contained a variety of questions about Internet use, the researchers only reported and analyzed responses to questions about their access to Internet, time and activities spend online, and the

location in which they typically access the Internet. They also reviewed data about the people with whom they are communicating online (whether they were strangers or people they knew offline, how much they know about them, etc.), as well as their perceived relationship with them (Subrahmanyam & Lin, 2007). The RULS consists of either Likert-type questions, with half worded positively and half worded negatively. The SSS-C contains 24 questions that assess perceived support from parents, classmates, teachers, and friends that were modified for adolescent use (Subrahmanyam & Lin, 2007). Each question offers two choices that the respondent must choose which statement is most like them and then rate how true it is for them.

The majority of the respondents (94.9%) reported having access to the Internet, with 87.8% indicating that they use the Internet in their homes (Subrahmanyam & Lin, 2007). The researchers utilized chi-square analyses to determine that there were no gender or ethnic differences with regard to Internet use. The adolescents reported spending an average of 85 minutes per day online and approximately 25 minutes per day using e-mail. Between-subjects ANOVA analyses revealed that there were no gender or ethnic differences between the amount of time spent online or on e-mail (Subrahmanyam & Lin, 2007). When asked about their relationship with chat partners, 23.7% of the adolescents started that they did not know the identity of the other person, but 59.0% responded that

they had never met the person offline and 12.2% reported that they had met them more than three times (Subrahmanyam & Lin, 2007).

A between-subjects ANOVA was used to assess whether loneliness was related to the overall amount of time spent online and/or on e-mail (Subrahmanyam & Lin, 2007). They found that when compared to girls, boys had higher scores on the RULS regardless of the time spent online or on e-mail. There was, however, a significant correlation between loneliness and whether an adolescent would approach an online acquaintance in an emergency, such that those who reported they would approach the person endorsed higher levels of loneliness than those who said they would not contact the person. The researchers used a chi-square analysis to determine if there was a relationship between perceived social support and online communication and found that two variables approached significance: whether the participant had met an online partner and whether they had become good friends with them. The percentages of these adolescents were higher for those who also reported low parent support (Subrahmanyam & Lin, 2007).

Based on their results, they proposed that adolescents spend time on the Internet at the expense of other real life activities, such as face-to-face interaction (Subrahmanyam & Lin, 2007). Subrahmanyam and Lin (2007) also proposed that this displacement may cause a reduction in real-life, strong interactions with peers and family members and an increase in weaker ties that are more superficial,

easily broken, and involve infrequent contact. These weaker ties offer less social support when compared to more intimate ties (Subrahmanyam & Lin, 2007). Another hypothesis is that youth who are lonely and have weak relationships in their offline life are drawn to the Internet for more opportunities for social interaction (Subrahmanyam & Lin, 2007).

The motive to maintain relationships with others reflects the need for adolescents to interact with people they already know through online communication (Peter et al., 2006). The motive to meet new people online is related to the desire to develop new relationships (Peter et al., 2006). Peter et al. (2006) conducted a study to measure adolescent's online communication with strangers and what motivates them to do so. The study involved 412 adolescents between the ages of 12 and 18 who reported that they had ever communicated with someone online (Peter et al., 2006). The participants were selected from six elementary, middle, and high schools in the Netherlands and were stated by the researchers to represent all levels of socioeconomic status, although specific demographic information was not reported. There was also no further description of the procedures and methods utilized to collect the data, aside from a brief description of the measures used.

The adolescents' online communication with strangers was categorized into different categories (ranging from 'never' to 'often') based on their responses to two statements depicting whether they communicate with "people they know in

person" and with "people they do not know," as well as the exclusivity of those communications (with -2 representing talking exclusively with people they know in person, with 0 representing talking equally with people they know and with strangers, and with +2 representing talking exclusively with strangers) (Peter et al., 2006). They also measured the frequency of online communication on a four-point metric scale, ranging from 'less than once a week' to 'every day.' Additionally, the intensity of online communication was measured by assessing how long chat sessions last, ranging from 'about half an hour' to 'about two hours or more.' The researchers also measured the adolescents' levels of introversion using the Adolescent Temperament List (Peter et al., 2006). Finally, the participants answered numerous questions to assess their motives for utilizing online communication.

Results of the study indicated that 5% of the participants reported talking exclusively with strangers, while 6% reported talking more often with strangers than with people they know (Peter et al., 2006). An additional 10% stated that they talked equally with strangers and with people they know (Peter et al., 2006). The remaining adolescents stated that they either talked exclusively with people they know (43%) or mostly with people they know (36%) (Peter et al., 2006).

While there were no significant gender differences present in regards to frequency of communication with strangers, it was found that younger adolescents talked more with strangers than older adolescents did (Peter et al.,

2006). Results of the study indicated that time spent online did not impact the frequency with which the participants communicated with strangers, but the intensity of chat sessions was positively correlated with communication with strangers. Introversion did not influence with whom the adolescents spoke more frequently. In an analysis of the potential motives for online communication with strangers, the researchers found that the adolescents who were utilizing online communication to meet people, to compensate for deficits in social skills, and for entertainment were significantly more likely to talk to strangers (Peter et al., 2006). However, if the participant was intending to use the Internet to maintain relationships, they were less likely to communicate with people they did not know.

Adolescents who are motivated to use the internet to develop new relationships may be more likely to communicate with strangers. In regards to the motive of social compensation, adolescents may try to compensate for inhibitions related to face-to-face interaction by forming online relationships (Peter et al., 2006). Adolescents are likely to communicate online more frequently with strangers if they feel they are lacking in social skills (Peter et al., 2006). This is also true if adolescents feel alienated from their parents due to either parental conflict or lack of communication with their parents (Wells & Mitchell, 2008)

With this in mind, there is a higher probability that youth will come in contact with strangers through the use of the Internet. Strangers are often defined

as people the youth does not know relative to the frequency of their online communication with the people they do know (Peter et al., 2006). The Internet offers "anonymity, reduced visual and auditory cues, the insignificance of physical distance and time, and the greater control over one's self presentation" (Peter et al., 2006, p. 526). A U.S. survey found that 39% of adolescents have communicated online with strangers (Peter et al., 2006).

The question following this statistic is what characteristics of youth influence the level to which they interact with strangers online. These qualities are reviewed in terms of what could place a youth at a higher likelihood for exposure to sexual solicitation and materials, as well as communication with strangers. There is an overlap of characteristics that include gender, age, and social functioning, which will be reviewed throughout this discussion. In terms of age, early adolescents more inclined to talk with strangers online than later adolescents (Peter et al., 2006). This reflects the developmental changes that occur in early adolescence and include the development of personal identity. The use of online communication, which offers anonymity and cue reduced communication, allows adolescents the opportunity to communicate with others and experiment with different identities (Peter et al., 2006). Youth with social anxiety or who are introverted are also more likely to communicate with strangers, due to the Internet allowing them to overcome social inhibitions more easily than in face-to-face contact (Peter et al., 2006).

Motivations to seek out online communication with strangers is also another important facet related to this topic. Peter et al. (2006) found five motives for online communication with strangers including: entertainment, social inclusion, maintaining relationships, meeting new people, and social compensation. Entertainment refers to the desire for adolescents to have fun, play, relax, and enjoy themselves with online activities (Peter et al., 2006). Those who are looking for entertainment may be less selective in who they communicate with online and may be more likely to communicate with strangers (Peter et al., 2006). Social inclusion is focused on the basic need for adolescents to belong to a group and search for a social network (Peter et al., 2006). Due to the anonymity and reduced visual and auditory cues provided by online communication, adolescents may be more likely to communicate with strangers online if they are searching for social inclusion (Peter et al., 2006).

Perpetrators of Sexual Solicitation

The Internet has created a new type of predator. This modality allows sex offenders instant access to other sex offenders and victims worldwide. Sex offenders can connect to each other for discussion of their sexual desires, share ideas about ways to groom victims, and find mutual support of their adult–child sex philosophies (Davidson & Gottschalk, 2011). Exchanges between these individuals can provide information on the ways they become interested in having

relationships and interactions with children and how to justify these behaviors (Holt, Blevins, & Burkert, 2010).

In 2011, a study was conducted to review the demographics of criminals who engaged in the sexual solicitation of youth. Seto, Wood, Babchishin, and Flynn (2012) compared online sexual solicitation offenders, child pornography offenders, and contact sexual offenders on demographic and psychological variables, as well as future risk. Data was collected from the Arkansas Sex Offender Screening and Risk Assessment (SOSRA) Program, which has been responsible for assessing all registered adult sexual offenders in the state of Arkansas since the fall of 1999 (Seto et al., 2012).

The SOSRA program assesses all offenders who reside in Arkansas and also those who are within a year of being released from prison (Seto et al., 2012). While some offenders have participated in treatment programs, there are others who have not received any treatment. The study involved 146 participants who were selected from the SOSRA database because they had engaged in online sexual offending, either sexual solicitation or child pornography, or had committed contact offenses against children (Seto et al., 2012). A participant was identified as an online sexual offender if they denied having sexual contact with a child during their interview, had no official record of such offenses, and who participated in a SOSRA polygraph exam. It is important to note that the comparison group of contact offenders tended to be lower risk than the general

population of contact offenders because those with extensive sexual offense histories were not usually referred for an SOSRA evaluation (Seto et al., 2012).

Data for the SOSRA were obtained through semi-structured interviews with offenders and through a review of their records, including criminal history, child maltreatment reports, probation notes, and treatment records (Seto et al., 2012). For the purposes of this study, the researchers retrospectively reviewed the completed files to analyze the results of the various measures they used to collect the data: the Stable-2007, which is used to assess the treatment needs for contact offenders; the Static-99, which estimates the probability of sexual recidivism; and the Vermont Assessment of Sex Offender Risk (VASOR), a structured risk assessment guide (Seto et al., 2012).

The results of this study were analyzed using Person chi-square test for categorical data or one-way analysis of variance (ANOVA) for interval or continuous data (Seto et al., 2012). Contact offenders were found have less academic achievement and to have lived with a minor prior to conviction at a significantly higher rate than solicitation or pornography offenders. Contact offenders were also identified as having fewer problems in the capacity for relationship stability and a higher frequency of having lived with a lover than both pornography and solicitation offenders. Child pornography offenders, on the other hand, were found to be older and to have participated in child-oriented activities at higher frequencies than both contact offenders and online solicitation

offenders. They were also more likely to acknowledge paraphilic sexual interests as well as had greater deviant sexual preferences and sexual preoccupation than both contact offenders and online solicitation offenders.

Three offender groups were identified during this study. Two online offender groups, sexual solicitation offenders and child pornography offenders, had more education and engaged more frequently in their interaction with victims than compared to those who had more direct physical contact with their victims (Seto et al., 2012). However, there were no significant group differences in offender age or ethnicity. Although there were inconsistent variations in age groups among male offenders. The reason for this inconsistency was due to that most offenders would engage in an online grooming process, but then eventually want to meet face-to-face with the youth. Online contact versus real world contact would change the categorization of the offender in the study which resulted in some inconsistent results as to what group primarily used which method of contact (Seto et al., 2012).

The Internet provides instant access to potential child victims worldwide, while the perpetrator can create a disguised identity for approaching children. Just as youth have access to the Internet and social media, so do perpetrators of sexual solicitations. Potential offenders have ready access to chat areas and social networking sites reserved for teenagers and children, and this information is used to discover how to approach and who to target as potential victims. Suddenly, it is

much easier to identify and track down home contact information and build long-term virtual relationships with potential victims. All of this can be accomplished before even meeting a child in person.

In a recent literature review, research has found that perpetrators can be divided into two categories: those who use the Internet to target and 'groom' children for the purposes of sexual abuse and those who produce and/or download inappropriate, illegal images of children (Davidson & Gottschalk, 2011). The 'grooming' process involves a process of socialization, as a perpetrator pursues an interaction with a child to gain trust in order to prepare them for sexual abuse. There are some similarities and differences between real world grooming and online grooming. Sometimes perpetrators are more direct in their interactions with youth, as there are less inhibitions and more potential victims to choose from. Then there are perpetrators who will invest more time in communicating with their victim.

The Internet offers a way for perpetrators to shrink the world and find more potential victims and enlarge the world by gaining access to anyone who would be interested in these 'services' (Davidson & Gottschalk, 2011). The perpetrator can contact anyone, anywhere, and at any time. While there was a time when perpetrators had to spend more time identifying and grooming a victim, the process moves much faster now. The perpetrator can leave messages and images to see if the child is interested in the relationship and to provide a state

of constant contact. The process is low cost, as the perpetrator has easy access to the Internet, and the use of digital files are the new 'gifts' (Davidson & Gottschalk, 2011).

Similar techniques of grooming procedures such as offering love, affection, attention, monetary gifts, and other items are used to illicit feelings of attachment between the offender and the victims (Wells & Mitchell, 2007). Yet, the stereotypical predator has evolved into something new and faceless. The main target of Internet solicitation is the teenage population and, with this population in particular, the offenders use very little force or deception about their age or sexual motives (Wells & Mitchell, 2007). Sexual predators have often found their young victims in online chatrooms or social media websites that allows for messaging (Subrahmanyam et al., 2006). Teens are now typically meeting with offenders after lengthy Internet communication and with the knowledge of the interest in a sexual relationship (Wells & Mitchell, 2007).

Youth Risk Factors

To better understand how youth are at risk on the Internet, it is important to review the typical risk factors of youth development and how these specific characteristics can contribute to increased levels of risk. Understanding general developmental tasks of adolescence can provide a framework to assess how adolescents' interpersonal relationships and overall socio-emotional functioning

impact their online interactions. What is understood about real world experiences and challenges can help people to understand youth in an online world.

Feelings of loneliness are often associated with this time in a youth's life. Loneliness has been defined as a psychological state which results from what a person desires and the reality of their relationships (Subrahmanyam & Lin, 2007, p. 662). Research has also suggested that loneliness is related to peer relations, self-esteem, family strengths, and parent-child relationships (Subrahmanyam & Lin, 2007). It has also been reported that low self-esteem impairs youth's ability to develop social competence, which can lead to an increased risk for loneliness (Subrahmanyam & Lin, 2007). Youth who spend a large amount of time on the Internet have been found to have lower peer status, predominately introverted personalities and tend to withdraw socially (Subrahmanyam & Lin, 2007).

Current research would suggest that the typical challenges associated with the developmental stage of youth, such as identify formation, moodiness, and desire for social inclusion, can increase the Internet's potential to bring about considerable psychological harm (Spada, 2014). Multiple studies have identified a pattern of Problematic Internet Use (PIU) (Spada, 2014). Internet usage in modern populations is quickly developing into a new problem. There was a time when certain behaviors were only visible in real world settings. Now the same types of behaviors can translate into an online world. This can create a new set of problems that can achieve a clinical level of significance. Not only do youth have

to manage face-to-face interactions, but also online interactions and identify formation. The frequency of these interactions and struggles now exist in two, sometimes separate, worlds. The increase in frequency of these interactions can cause an increase in the typical problems a youth would experience. Studies have shown that PIU can be defined in four primary domains (Spada, 2014).

Excessive use of the Internet can often lead to a loss of sense of time, which can also result in the neglect of other basic daily tasks. Individuals who tend to withdraw from social interactions, may experience feelings of anger, depression, and tension when they do not have readily available access to the Internet. These behaviors may develop into a reliance on Internet usage and electronic devices which perpetuates a need for more hours online and potentially better electronic devices. The reliance on electronic devices and Internet access can lead to negative consequences, such as an increase in argumentative behavior and lying, a decline in academic achievement, social withdrawal, and fatigue. These behaviors are characteristic of those with higher levels of Internet usage. The mode of thought that it can almost be considered an addictive type of relationship between the individual seeking to have their unfulfilled need met and the opportunities offered by the Internet's social constructs (Spada, 2014).

In addition to typical developmental struggles, youth with a history of abuse are at risk for developing mental health disorders. Youth who have been sexually abused are far more likely to develop maladaptive coping skills in an

attempt to manage their mood (Wells & Mitchell, 2007). Other factors such as cognitive disorders, stress, emotional pain, avoidance, low self-esteem, guilt, delinquency, vulnerability to re-victimization, and interpersonal difficulties are also associated with sexual abuse histories. Other risk factors include children who are in the care of the state, children with maltreatment experiences, emotionally immature children, children with social deficits, love or attention deprived children, children with a high respect for adults, and children with a low self-esteem (Leander et al., 2008). Children with these characteristics are vulnerable to conventional abuse cases and are also vulnerable to abuse on the Internet.

As previous studies have shown these abuse experiences and symptoms are often associated with post-traumatic stress disorder (PTSD). Experiences related to PTSD symptoms include exposure to traumatic events, such as community violence, domestic violence, child maltreatment, suicide of loved ones, war, terrorism, and disasters (Brown, 2005). In a review of literature by Brown (2005), statistics indicate that 36% of children are sexually abused, 10% of teenagers are physically abused, between 3.3 and 10 million children are living in households with domestic violence, and 70% witness community violence. According to the *Diagnostic and Statistical Manual of Mental Disorders Fifth Edition*, PTSD is the consequence to a traumatic event in which actual or threatened death or serious injury is witnessed or experienced by the individual

(American Psychiatric Association, 2013). The responses can include "intense fear, helplessness, or horror", or for children it may also include "disorganized or agitated behavior" (Brown, 2005, p 759).

A trauma or abuse history can lead to problematic behaviors and symptoms including re-experiencing, avoidance, and arousal (Brown, 2005). Re-experiencing can include nightmares, intrusive thoughts, engaging in repetitive play involving the traumatic event or having generalized nightmares based on the event (Brown, 2005). Avoidance is defined as a "purposeful effort to avoid trauma cues, inability to remember elements of the traumatic event, and social detachment" (Brown, 2005, p. 760). Arousal can include difficulty sleeping, hypervigilance, and psychosomatic symptoms (Brown, 2005). These symptoms and experiences can cause significant impairment in social, school, or family levels (Brown, 2005).

Impairment in a youth's ability to function can lead to PIU. Trauma symptoms can frequently overlap with other diagnoses, as the symptoms associated can result in comorbid disorders and maladaptive behaviors. Research has shown that PIU has also been found in youth populations who are also struggling with drug usage, addiction, and attention-deficit hyperactivity disorder (ADHD) (Spada, 2014).

With modern youth becoming easily overwhelmed with the demands of budding adulthood, youth have reported that the Internet can be a readily

accessible way of coping (Spada, 2014). Youth can explore problem solving strategies, view entertainment, gain reassurance, engage in avoidant behaviors, find relief from depressive symptoms and obtain a means of satiating compulsive behaviors (Spada, 2014). Ultimately, the Internet is a perceived safe way of engaging in self-regulatory behaviors. Youth populations who are experiencing negative reactions to engaging in the real world tend to see other domains which may be determined as more socially acceptable. With the promise of anonymity, youth can enter into a new online environment where they can explore their own identity, master developmental challenges and perhaps cope with their own symptomology.

Multiple systemic levels are always at play in the life of a youth. At an individual level, a youth's experiences can impact their ability to function both cognitively and biologically (Saxe, Ellis, & Kaplow, 2007). At a microsystem level, family dynamics, developmental history, and psychological resources are addressed (Saxe et al., 2007). This can refer to the mental health of the family and their interactions, educational history, drug use, employment history, and physical health and development throughout the family construct. In the exosystem, social structures such as school, neighborhood, and peers influence functioning (Saxe et al., 2007). As it has been stated previously, youth who have difficulties with social skills may be more drawn to the use of Internet communication. At the macrosystems level, cultural beliefs and values shape

their understanding of the world, their personal identity, and their behaviors (Saxe et al., 2007).

In terms of gender, females are more likely to internalize their emotions related to experiencing a traumatic event (Brown, 2005). Female youth display higher levels of anxiety, depression and post traumatic symptoms (Brown, 2005). Boys are more likely to externalize their emotions such as oppositional behavior, aggression, substance abuse, and impulsivity (Wells & Mitchell, 2007). The way in which a male or female youth manages these symptoms can contribute to co-morbid diagnoses. For example, three quarters of adolescents diagnosed with PTSD had at least one co-occurring mental health diagnosis such as attention-deficit hyperactivity disorder, depressive disorders, and anxiety disorders (Wells & Mitchell, 2007).

The focus on the communication aspect of Internet usage among adolescents is important. In the study conducted by Subrahmanyam and Lin (2007), male adolescent participants, who reported that they would approach an online friend in emergencies, reported a higher level of loneliness than females. This is important to note if adolescents feel more comfortable with their online relationship and would turn to them as a form of support over face-to-face interactions and support systems. Participants in this study who reported feeling less supported by their parents were more likely to have met someone online and then develop a close friendship with them (Subrahmanyam & Lin, 2007).

Victimization

With the rate at which youth are accessing the Internet, there is an increased likelihood that they will interact with strangers online (Peter et al., 2006). If youth come into contact with more strangers, it begs the questions whether this could place a youth at a higher likelihood for exposure to sexual solicitation and materials. There is an overlap of characteristics that include gender, age, and social functioning, which will be reviewed throughout this discussion. In terms of age, younger adolescents were more inclined to talk with strangers online than older adolescents (Peter et al., 2006). This reflects the developmental changes that occur in early adolescence and include the development of personal identity. The use of online communication which offers anonymity and cue reduced communication allows adolescents the opportunity to communicate with others and experiment with different identities (Peter et al., 2006). Introverted youth and those with social anxiety are also more likely to communicate with strangers due to the Internet allowing them to overcome social inhibitions more easily than face-to-face contact (Peter et al., 2006).

The motive to maintain relationships with others reflects the need for adolescents to interact with others with people they already know through online communication (Peter et al., 2006). The motive to meet new people online is related to the desire to develop new relationships (Peter et al., 2006). Adolescents who are motivated to use the internet to develop new relationships

may be more likely to communicate with strangers. In regards to the motive of social compensation, adolescents may try to compensate for inhibitions related to face-to-face interaction by forming online relationships (Peter et al., 2006). Adolescents are likely to communicate online more frequently with strangers if they feel they are lacking in social skills (Peter et al., 2006). This is also true if adolescents feel alienated from their parents due to either parental conflict or lack of communication with their parents (Wells & Mitchell, 2008)

With the rising prevalence of Internet usage, it is no surprise that the rate of sexual solicitation of minors online is also increasing. In a study utilizing the YISS-1, it was found that 13% of youth between the ages of 10 and 17 received an unwanted sexual solicitation or approach over the Internet (Wells & Mitchell, 2007). A national telephone study, conducted in 20011, indicated that 9% of youth report being sexually solicited online in the one year (Wells & Mitchell, 2014). Unwanted sexual solicitations online may include the requests for the youth to talk about sex, to share personal sexual information, or do sexual acts (Wells & Mitchell, 2014). Approximately 8% of adolescents have experienced sexual harassment, with girls more often sexually harassed than boys (Subrahmanyam et al., 2006). In a study conducted between the years 1999 and 2000, it was found that youth who were experiencing negative life events, online victimization, or depression where at a higher likelihood to be solicited online (Wells & Mitchell, 2008).

In regards to victimization, a study of children between ages 2 to 17 found

that those who have experienced four or more different types of victimization in a

year were likely to develop trauma symptoms (Wells & Mitchell, 2007). A

majority of children who experience a trauma report symptoms related to PTSD

up to one year following the trauma (Brown, 2005). Not only can they display

symptoms of complex trauma or PTSD but also anxiety, separation anxiety,

depression (Brown, 2005). Aggression, oppositional behavior, and juvenile

delinquency can also be a symptom related to a trauma history (Brown, 2005).

As was stated earlier, somatic symptoms such as headaches and gastrointestinal

problems can also be common among children who are traumatized (Brown,

2005). Younger children may experience regressive behaviors (Brown, 2005).

Children may also have deficits such as insecure attachment within relationships,

difficultly reading social cues, lower peer status, social skill deficits, and negative

social networks (Brown, 2005). They may also experience deficits in cognitive

functioning such as "developmental delays, reading disabilities, and difficulties

with comprehension and abstraction" (Brown, 2005, p. 760). Also, children who

have experienced trauma more often experience poor self esteem (Brown, 2005).

Exposure to trauma and chronic PTSD is associated with "long term

changes in brain structure and function, with increased risk for suicide, substance

abuse, and health problems" (Brown, 2005, p. 760). This can continue to

develop years after the trauma has occurred and continue to worsen if there is

repeated exposure to traumatic events. "Adult with childhood histories of trauma exposure have reported suicidality, aggressive and violent behavior, nonviolent criminal behavior, substance abuse, interpersonal problems, and vocational difficulties" (Brown, 2005, p. 761). The way in which youth are able to process their trauma and social information may have an effect on how they view themselves and others and also how they internalize symptoms of PTSD, anxiety, complex trauma, and depression, and externalize behaviors (Brown, 2005).

It is no surprise that youth who experienced abuse may display these symptoms and seek out emotional compensation on the Internet. However, the compensation they seek may also be harmful. It has also been shown that youth who are exposed to unwanted sexual material or solicited online display PTSD symptoms similar to those who have experienced more conventional sexual abuse (Wells & Mitchell, 2007). This is important to note, as Internet usage may create a barrier between the offender and the victim but the symptoms are very similar between unwanted interaction online and unwanted interaction in real life.

Also youth, who experience victimization, such as sexual assault or physical abuse, may also be vulnerable to sexual exploitation in an online world (Wells & Mitchell, 2008). This thought is drawn from the patterns of abuse such that people who experience an abuse or trauma may be more likely to have a similar negative experience in the future. Youth who have experienced offline victimization "may exhibit posttraumatic stress, depression, and other trauma

symptomatology which may be associated with unique patterns of Internet use" (Wells & Mitchell, 2008, p. 228). High-risk Internet users who have experienced parental conflict, sexual assault, or physical abuse, typically also meet criteria for a preexisting mental health or other challenges that are associated with increased vulnerability (Wells & Mitchell, 2008). Research has found that "victims of online sexual solicitation share characteristics of traditional sexual abuse victims, including post-traumatic stress symptomatology" (Wells & Mitchell, 2008, p. 228).

The data from The First Youth Internet Safety Survey (YISS-1), which is also being used in this study, found that "19% of youth surveyed had received an online request to engage in sexual activities or sexual talk or to give personal sexual information to an adult" (Wells & Mitchell, 2008, p. 228). Subsequently, the YISS-2 was developed to further address Internet usage. It was found that 15% of youth Internet users "reported concurrent high family conflict or physical or sexual abuse in the past year" and of those 87% reported high family conflict, 8% sexual abuse and 13% physical abuse (Wells & Mitchell, 2008, p. 203). It was found that high-risk youth had higher levels of Internet use and close to half of "the high-risk youth talked with people they had met online" (Wells & Mitchell, 2008, p. 231). "Sixty-five percent of high-risk youth posted personal information online, 40% sent personal information online" and "twenty-eight

percent of the high-risk youth had received an aggressive sexual solicitation online" (Wells & Mitchell, 2008, p. 231).

High-risk youth were found to be almost 2.5 times more likely to report online sexual solicitation (Wells & Mitchell, 2008). Youth who feel isolated, misunderstood, depressed, and lacking a support system may be more vulnerable to online solicitors (Wells & Mitchell, 2008). It is possible that the "characteristics of victimized youth may influence their online safety by compromising their capacity to resist or deter victimization and thus make them more vulnerable targets for online exploiters" (Wells & Mitchell, 2008, p. 232). It is important to not only address the mental health of an individual youth but also their ability to develop secure attachments. "Research suggests that secure attachment may moderate negative outcomes for youth who have experienced trauma such as child sexual abuse" in their online interactions (Wells & Mitchell, 2008, p. 232).

In a review of literature, research conducted in 2010, found that in the U.S. 15% (10–12 year olds) and 28% (16–17 year olds) had been exposed to pictures of naked people or people having sex without seeking or expecting to view such pictures (Livingstone & Smith, 2014). Approximately 14% had seen sexual images online, with older teenagers four times more likely than the youngest to have seen such images. Research found that prevalence of online

sexual solicitation has varied from 2% among 10–12 year olds rising to 14%

among 16– 17 year olds (Livingstone and Smith, 2014).

Some researchers describe these events in more general terms, such as

"cyber victimization" (Livingstone & Smith, 2014). Historically, "online

harassment" and "cyber bullying" have been more commonly used terms to

describe the unwanted social engagements online. It is likely that the usage of

terms, such as cyberbullying, would lead to more impactful acts being

overlooked. The most widely accepted definition of cyberbullying is described as

an aggressive, intentional act that is repeatedly carried out by a group or

individual, using electronic forms of contact, against a victim who cannot easily

defend themselves (Livingstone & Smith, 2014). Victimization would suggest

that there is an imbalance of power between the perpetrator and victim. Bullying

is the focus on the intent to cause harm, the imbalance of power, and the

repetition of the acts. The anonymity provided by the online environment can

contribute to a power imbalance, since the victim does not know the identity of

the perpetrator and can be more difficult for the victim to know how to respond

and cope. Cyber bulling translates a typical bullying definition to include the

intentional behavior of harming another person through the use of computers, cell

phones, and other electronic devices (Livingstone & Smith, 2014).

One of the first steps that can be taken to address online victimization is

by identifying at risk populations. Based upon previous research, youth

populations are at a higher risk for victimization than adult populations. Youth

who exhibit a need for belonging and attachment are also placed at a high risk for

victimization. Mental health professionals need to be aware of these issues in

order to help prevent re-victimization through the use of the Internet. It should be

noted that not all youth who are solicited have experienced offline victimization

and not all troubled youth are sexually solicited online (Wells & Mitchell, 2008).

In the United States, 10-12-year-old youth who have reported seeing

online sexual materials reported that they responded with being very upset with

the experience (Mitchell et al., 2008). This information is gathered from analysis

of the YISS-2 interviews, which were also utilized in this study. As youth move

more into adolescence, this trend decreases as sexuality become a more accepted

part of personal development. The developmental stage when exposure to

unwanted sexual materials occur can have an impact on how the youth responds

to that experience, potentially impacting their future development.

Summary

The literature has shown that there has been a steady increase in youth

access to the Internet. The increase in accessibility has the potential to increase

the potential risk for online harassment and traumatization of youth populations.

While knowledge of online risk factors is being researched and distributed, this

topic is still a relevant problem. "Health professionals who hear about an

unwanted sexual solicitation should be aware of this potential and probe for other

victimizations and personal problems that youth may be experiencing" (Wells &

Mitchell, 2008, p. 233). Research has primarily focused on treatment

interventions consistent with cognitive behavior therapy (CBT) to address the

levels of Internet usage. These interventions can teach individuals to keep a daily

log of Internet activity, teach more appropriate time management skills, and

restructure cognitive distortions that may perpetuate the maladaptive usage of the

Internet (Spada, 2014). For youth populations, it is also important to include the

family system. Family based interventions can improve communication and teach

family monitoring of Internet use. These interventions can address the underlying

behaviors, emotional dysregulation, and difficulties with social interactions.

Research has suggested that there may not be a distinction between the

online and offline experience of the problems for youth. However, the Internet

may have introduced something qualitatively or quantitatively new for this

developmental stage, in the form of increased severity, increased frequency, or a

new dynamic that requires a new response (Wells & Mitchell, 2008).

Professionals should learn more about how young clients are using the Internet

and their knowledge about Internet safety. They should talk to youth about the

potential dangers which may arise as a result of talking online about sex (Wells &

Mitchell, 2008). Professionals should also suggest appropriate responses when

sexual solicitation occurs such as changing email addresses, ending questionable

communications, and contacting a trusted adult and/or law enforcement (Wells &

Mitchell, 2008). It is also important to address this issue at multiple systemic levels such as the family, school, and community environments to make people more aware of the need for teaching youth about Internet safety and privacy.

Chapter III: Methodology

The purpose of this study was to review archival data and to identify

relationships between history of abuse and sexual solicitation. Archival data were

extracted from prior studies to explore a direct analysis of youth with an abuse

history and their victimization in online formats.

The Survey

This data set was made available by the National Data Archive on Child

Abuse and Neglect, Cornell University, Ithaca, NY. David Finklehor, Kimberly

J. Mitchell, and Janis Wolak originally collected data from the First Youth

Internet Safety Survey (YISS-1) in the years 1999-2000. The funding for the

original study was provided by the National Center for Missing and Exploited

Chicago. Data from the Second Youth Internet Safety Survey (YISS-2) was

conducted in 2005 and information was collected by Schulman, Ronca, and

Bucuvalas, Inc. The data for this YISS-1 study were collected between August

1999 and February 2000. The follow up study was conducted during the months

of March 2005 to June 2005. The data were collected through interviews for the

Youth Internet Safety Survey and conducted by a trained staff from an

experienced national survey research firm.

Both studies involved telephone interviews, each with a national sample of

1500 youth Internet users, ages 10 to 17. The interviews measure changes in the

frequency and nature of unwanted online exposures to sexual solicitations and

pornography. Additionally, YISS-2 goes beyond the findings of YISS-1 by including more details about the impact on youth of unwanted exposure to sexual solicitations and exposure to sexual materials.

The Youth Internet Safety Survey (YISS) is a survey which consists of a parent and a child questionnaire which were developed for the original research project. The rates of exposure to sexual solicitation, unwanted exposure to sexual material, and harassment were estimated based upon series of screener questions about unwanted experiences while using the Internet. Two of the screeners pertained to harassment, four pertained to unwanted exposure to sexual materials, three were focused on sexual solicitation, and one asked if anyone online had encouraged the youth to run away from home. More extensive follow up questions were asked about these unwanted incidents. The follow up questions were limited to only two reported incidents due to time constraints. If the youth reported more than two incidences then runaway incidents were given priority for follow up questions, followed by harassment incidents, then sexual solicitation incidents, and, finally, unwanted exposure incidents.

The National Incidence Studies of Missing, Abducted, Runaway, and Thrownaway Children (NISMART-2) developed a phone interview process which was used for the National Household Surveys of Adult Caretakers and Youth. The study used computer assisted telephone interviewing methodology to collect information on missing child episodes from adults and youth in a national

probability sample of households. In the YISS-1 study, 16,111 interviews were

completed by adult primary caretakers and 31, 787 children were identified to

participated in the additional interview. Of those children who were identified

5,015 youth interviews were conducted. In the YISS-2 study, interviews were

conducted with 3,956 households. From this sample families with eligible

children refused to complete the survey in 1,839 households, some parents

completed with initial screener or interview but then declined to have their child

interviewed. Of the families with eligible children, 1,500 households completed

the survey.

The Participants

The Youth Internet Safety Survey used telephone interviews to gather

information from a national sample of 1,501 (YISS-1) and 1,500 (YISS-2) youth,

ages 10 to 17, and their parents participated in a telephone survey. The YISS-1

sample consisted of 756 boys and 705 girls within the United States. The YISS-2

sample considered of 735 boys and 765 girls This sample was determined to have

"Regular Internet use" as defined as using the Internet at least once a month for

the past six months on a computer at home, a school, a library, someone else's

home, or another location. Internet use was determined by a short interview with

the parent or guardian and then collaborated with the youth interview.

Households with the target youth population were identified through a large

household survey thought the Second National Incidence Study of Missing, Abducted, Runaway, and Thrownaway Children.

Of the participants, on average, 77% had a married guardian, 10% had a divorced guardian, approximately 6% had a single guardian, 5% had a guardian living with a partner, and 2% had a separated/widowed guardians. On average, most participants were White or about 75%, and approximately 11% identified as African American, 3% identified as American Indiana or Alaskan Native, and 3% as Asian. A relatively high educational level was reported by the participants of these archival studies, with a majority of the participants (31%) lived in a home with a college graduate, a post college degree (22%), or some involvement in a college program (22%) and 21% reported living with a high school graduate and only 2% with a non-high school graduate. The highest level of annual household income at more than $75,000 was reported by 28% of the participants, with 23% reporting an annual income between $50,000-$75,000, 32% with an income between $20,000-$50,000, and 8% had an income of less than $20,000. The youth in the first study (YISS-1) were790 (52.6%) male participants and 708 (47.2%) female participants. In the second study (YISS-2) the participants were 738 (49.2%) males and 760 (50.6%) females. These demographics reflect the average of YISS-1 and YISS-2 combined (see Table 1 and Table 2 for specific demographic information).

Interviewers screened for regular Internet use by the youth in the

household between the ages of 10 to 17. The child in the household with the most

frequent Internet use was identified though an interview with the parent who

knew the most about the child's Internet use. The interview included questions

about the household rules and parental concerns about Internet use and

demographic characteristics. The interviewer then requested to interview the

identified youth and the young participants were given $10 for their participation.

Parents were told that the interview would include questions pertaining to sexual

material their child may have been exposed to.

Oral consent was obtained from the youth participants after the survey was

described. The structured interviews with youth lasted between 15 to 30 minutes

and were scheduled at times when they felt they could talk freely and confidently.

Questions were constructed so the youth could respond with mostly one word

answers, though they were allowed to share more detailed experiences if they felt

comfortable. The survey was conducted on the supervision of the University of

New Hampshire Institutional Review Board and followed the rules mandated by

research projects funded by the U.S. Department of Justice. The youth

participants received checks for $10 and an Internet safety brochure.

Procedure

This researcher utilized archival data gathered in the two YISS data sets.

For the archival data analysis in this study, approval for use of the archival data

was obtained. The archival data sets were de-identified prior to submission to this

researcher. This researcher submitted for review and the research was approved

by the Institutional Review Board at the Adler School of Professional Psychology

(see Appendix A). As this is an analysis of archival data, no informed consent

from the participants was required other than the initial consent obtained by the

original data holders. Authorization to analyze data was obtained from the

current holder of the data sets and steps were taken to insure the security of the

data (see Appendix B). The data were reviewed to identify participants who

positively endorsed an experience of abuse and positively identified an experience

of sexual solicitation and/or exposure to unwanted sexual materials online. All

participated were included in the analysis and participants were identified as those

who responded to reported a history of physical and/or sexual abuse and those

who did not.

Data Analysis

Each archival data set (for the years 2000 and 2005) was analyzed

separately using two chi-square tests of independence in The Statistical Package

for the Social Sciences (SPSS) version 22 to evaluate each research question. For

Research Question 1, the relationship between the number of youth who reported

sexual abuse (as defined as an experience of being forced to do something sexual

in the past year) and the youth who received online sexual solicitation (as defined

as being asked to do something sexual) was examined. For Research Question 2,

the relationship between the sex (male or female) of the youth with an abuse

history and reported sexual solicitation was examined. The results of the chi-

square tests are detailed in the results chaper.

Chapter IV: Results

Descriptive Statistics

The participants included in this study completed a phone interview regarding youth and their interactions on the Internet. The YISS-1 had a national sample of 1,501 youth and the YISS-2 had a national sample of 1,500 youth, ages 10 to 17. The YISS-1 sample consisted of 756 boys and 705 girls and the YISS-2 sample considered of 735 boys and 765 girls. To analyze the data from the two archival data sets, it was assumed that exposure to unwanted sexual solicitation was a categorical variable and the history of traumatic experience was a categorical variable. While the original data further identified types of abuse/traumatic experience, the data were categorized into whether or not a history of abuse/traumatic experience was indicated. For YISS-1, there were 119 youth who reported online sexual solicitation in the past year and 12 who identified a history of sexual abuse in the past year (see Table 3). For YISS-2, there were 105 youth who reported online sexual solicitation in the past year and 20 who identified a history of sexual abuse in the past year (see Table 3).

Research Question 1

In order to test Research Question 1, the data sets for 2000 and 2005 were analyzed separately (see Table 4). A chi-square test of independence was performed to examine the relationship between the number of youth who reported an experience of being forced to do something sexual in the past year (sexual

abuse) and youth were asked to do something sexual when not wanted in the past year (sexual solicitation). These are the categorical definitions which were used for the purposes of the original data collection. As can be seen by the frequencies cross-tabulated in the Table, there is a significant relationship indicating that, in the year 2000 for the YISS-1 data, children who reported sexual abuse were more likely to report online sexual solicitation $(x^2(1) = 18.96, p < 0.001)$. Although statistically significant, this association between online sexual solicitation and sexual abuse was very weak, $\varphi = 0.113, p < .001$. It is noteworthy that one of these cells had less than an expected value of 5 due to the small sample size.

In the year 2005, for the data set YISS-2, there was also a significant relationship indicating that children who reported sexual abuse were more likely to report online sexual solicitation $(x^2(1) = 57.34, p < 0.001)$. Although statistically significant, this association between online sexual solicitation and sexual abuse was weak, $\varphi = 0.196, p =< .001$. It is noteworthy that one of these cells had less than an expected value of 5 due to the small sample size.

Overall, it should be noted that both data sets had a small number of participants who reported experiencing abuse. There is a significant association between sexual abuse and sexual solicitation. However, this result needs to be taken into consideration for the small sample size within the context of the overall data. Of the 118 YISS-1 participants, who reported having been sexually solicited online in the past year, also reported being sexually abused in the past year. Of the

12 YISS-2 participants, who reported having been sexually abuse, only 5 reported

also having been sexually solicited online in the past year.

Research Question 2

In order to test Research Question 2, the data sets for 2000 (YISS-1) and

2005(YISS-2) were analyzed separately (see table 5). A chi-square test of

independence was performed to examine the relationship between the sex (male

or female) with an abuse history and the sexual solicitation status of the youth. As

can be seen by the frequencies cross-tabulated in the Table in the year 2000, there

was no significant relationship between sex and solicitation status in children who

reported sexual abuse $x^2(1) = 0.78$, $p = .38$. It is noteworthy that three of these

cells (75%) had less than an expected value of 5 due to the small sample size. In

the year 2005, there was also no significant relationship between sex and

solicitation status in children who reported sexual abuse $x^2(1) = 2.40$, $p = .12$. It

is noteworthy that two of these cells (50%) had less than an expected value of 5

due to the small sample size.

Chapter V: Discussion

The purpose of this study was to assess whether there is a relationship between a youth's history of abuse and the experience of being sexually solicited online. Also, the relationship between an abused youth's sex and the likelihood of sexual solicitation online was studied. These relationships were analyzed at two different points in time to see if these correlations change. Recently, there has been a focus on identifying how trauma and abuse history can significantly impact the functioning of youth populations. As interest in victimized populations increased, so has interest of how youth are seeking communications within the context of online formats. As online communications are increasingly popular, youth may be at a higher level of risk for sexual solicitation. It would be useful to identify the variability in how often youth are victimized by unwanted exposure to sexual materials and/or sexual solicitation. With the rapidly changing climate of technology and socialization on the Internet, it was hoped that reviewing the historical trend may give an educated prediction for future trends.

To date, this is the first study to specifically review the relationship between a youth's abuse history and their experience of sexual solicitation online. Previous studies tended to focuses on the demographics of the participants in these studies, as well as taking a more retrospective analysis of the youth's experience. The correlation between trauma and online sexual solicitation has not been specifically addressed, but rather has been a footnote to the information

gathered in other forms of analysis. It was the intention of this study to provide additional information to assess this relationship and hopefully inform prevention and intervention strategies.

Explanation of Results

The results from this study indicated that youth who reported an abuse history were more likely to experience online sexual solicitation than youth who did not report an abuse history. This is consistent with prior research that indicates that youth who have experienced an abuse are more likely to experience another event of abuse. Youth who have a trauma/abuse history display symptomology consistent with experiences of depression, anxiety, low self-esteem, and difficulties with engaging in social interactions. In current society, the use of technology and the Internet are becoming more common as a form of social communication. Those individuals who may struggle with regulating clinical symptomology may engage in online interactions that place them at a higher level of risk.

It is expected that the youth who participated in the original data studies were open about their experiences of abuse and also about their experiences of online sexual solicitation. This may have contributed to the significant correlation between the variables, although based on a very small sample.

The results of this study did not find significant differences between an abused youth's sex and their likelihood for online sexual solicitation. This is

consistent with other findings in the literature regarding how males and females utilize the Internet and how this may contribute to the rate of exposure. Females are, traditionally, more likely to be the victim of sexual solicitation. Females engage in more personal and emotionally related communications in an online format than males. However, males spend more time than females engaging in online activities. This would place males at a higher likelihood of exposure based upon the fact that they may be online a larger amount of time than females.

These gender factors appeared to have balanced out within the results of this study. Males and females with a reported abuse history were equally likely to have experienced sexual solicitation. This would suggest that perhaps the experience of online sexual solicitation may vary, but the frequency is very similar.

A review of these results suggest that this is a continued problem for youth. There have been changes in the rate of sexual solicitation of youth, but the correlation between an abuse history and the exposure to online sexual solicitation remains steady. While the overall problem of online solicitation is increasingly being addressed with the introduction of new laws and policies to help monitor the activities of youth on the Internet; the relationship between trauma and online sexual solicitation remains

These findings suggest the problem of online solicitation for youth with a prior abuse history needs further exploration in our current literature. This

problem is likely to continue without significant prevention and interventions efforts made to address this relationship.

Limitations

There are some significant limitations to this study warranting consideration. The main limitation which has impacted the viability of this study is the small sample size. Comparatively, youth who reported an experience of abuse is a small percentage compared to the youth who did not report an abuse history. This means that the generalizability of this data should be taken with caution. Also the participants were predominantly identified as White with a higher income and higher levels of education. This sample is not representative of the U.S. as a whole nation. While it is important to review the data overall, specifically consideration should be given to the analysis of the data found with the abuse youth sample.

Due to the limited number of participants who reported an abuse history, there can be alternate explanations as to why this sample was so small. As the study relied on self-report and voluntary participation, it is possible that participants wanted to present a positive report of their experiences. Those who volunteered to participate may be more likely to want to please the interviewer. Also the general demographics of the sample population may suggest that these participants were less likely, overall, to have experienced abuse. Factors such as,

economic status, location, age, and family structure may have resulted in participants who were less likely to have experienced, and/or report abuse.

Though the interviews were conducted over the phone and precautions were taken to insure the participants information was kept confidential, youth may not have felt comfortable in discussing any experiences of trauma. Due to the limited time which is spent on the phone with the participant, the youth may not have accurately reported their experiences. For youth, who have experienced abuse, there is a need for rapport and positive support to further their discussion of a traumatic experience. Youth may not have been comfortable with the interview process and may have further minimized their experiences.

Additionally, the interview questions focused on the youth's recent experience of abuse, which does not account for youth who may have experienced abuse at a younger age. This designation of questions may have impacted the youth's report of events. More in-depth questions conducted through the interviews, could account for multiple types of abuse and traumatic experiences, along with a more comprehensive history, may have provided this study with greater detail. As the original data were not specifically focused on these questions, it is understandable as to why the questions focused on current information and experiences. Further studies which are specific to this topic may have phrased and structured their interview questions differently to provide greater detail within this population.

Contributions to Literature

Overall, youth are very quickly integrating the Internet as a normal aspect of their development and everyday life. As the number of people with access to the Internet increases, so will the number of youth who are potentially vulnerable to exposure to unwanted sexual materials and/or sexual solicitation online. Although the majority of youth tend to describe the Internet as a positive and normal means of socialization, there is importance in identifying youth at risk, which may overlap with a more clinical population.

In the research reviewed by Livingstone & Smith (2014), Davidson & Gottschalk (2011), and Brown (2005), this study has found that there is a relationship between behaviors and symptoms typically associated with an abuse history and sexual solicitation online. This study aimed to bridge the cap in taking a more preventative approach to addressing intervention and the risk factors for youth in an online world. Prior literature reviews had found that specific symptoms and behavior placed youth at higher levels of risk. This study has results which are consistent with the risk factors, as indicated by those youth who reported an abuse history. While this study did not yield a significant result due to the small sample of youth with a reported abuse history, these results should be considered as the next step in understanding the correlation between abuse history and experiences of online sexual solicitation.

There are multiple strengths and limitations to this study, as it pertains to a contribution of literature. In the studies completed by Subrahmanyam and Lin (2007) and Peter et al. (2006) there is consistency with youth engaging in problematic behaviors and their level of risk for sexual solicitation online. This study furthers the hypothesis that youth with an abuse history will typically engage in maladaptive coping skills and problematic behaviors, which increases the probability that they will interact with strangers in an online world. Strangers can create any identity to groom potential victims. The profile of youth victims is still consistent with you who an experience an abuse history. The feelings of loneliness, desire for social interactions, and seeking support from others online is typical of abused youth. Perpetrators of sexual solicitation seek out youth with these characteristics (Seto et al., 2012).

The overall message from this literature, is that there are very few differences between a real world experience and an online world experience. Traditionally, perpetrators identify victims which are more likely to engage in maladaptive coping skills and behaviors. It was expected that females would continue to be the most likely victims. Subrahmanyam et al. (2006) and Wells & Mitchell (2007) found that female youth were more likely to be victims of online sexual solicitation. This would be the same for real world experiences: females are more likely to be victims of sexualized crimes than males. However, it should be addressed that these studies look at youth populations as a group. In a general

youth sample, there is a higher level of risk for female populations. This study has shown that are no significant difference between gender when the sample of youth is focused on the report of an abuse history. When an abuse history has been reported by a youth, the original gender norms become equalized. Abuse males and female youth are equally likely to be sexually solicited online.

The structure of this study is very similar to past studies on this topic. This has proven to be both a strength and weakness. The limitations of these studies is that very similar sample populations are used. The participants tend to be adolescents, identify as predominantly White, and come from higher income families. While this allows for close comparisons between studies, this limits the ability to generalize the information to more diverse populations. There can be cultural implications which may affect the results of these studies which are not being addressed. Future studies should focus on comparing more diverse populations to see if the results remain consistent or if there are changes in the results as sample populations become more diversified.

The use of YISS-1 and YISS-2 for analysis of this topic has proven to be very beneficial to the professional community. Many researchers, such as Wells & Mitchell (2008) and Mitchell, Wolak, & Finklehor (2008), continue to utilize and review these interviews to provide additional understanding of this population and topic. The data sets continue to be used and provide a foundation for studies moving forward. The original YISS studies have continued to be analyzed over

and over again, and a more recent YISS-3 has been administered. Youth Internet Safety Survey (YISS-3) was conducted continue to gain information about more current youth internet interactions and sexual solicitation online. Data collection for this third national study occurred between August, 2010, and January, 2011. The YISS-3 had a national sample of 1,560 youth Internet users, ages 10 to 17 years (Wells & Mitchell, 2014). The overall sample of youth was equally divided between males and females (50% each category) and 73% reported being of White race/ethnicity. Two thirds of the youth lived with both biological parents, the highest education level in the household was a college graduate for 37%, and 30% of the sample reported a household income of under US $50,000 in 2010.

While the YISS-3 was not available yet as archival data at the time of this study, the general findings of this continued research is reported by the authors and will support the need to continue to research these issues. It is valuable to obtain current data about youth and the Internet, but the process of collecting and analyzing the data takes more time than it takes for new technology to evolve and provide a new level of online access. It is hoped that this data continues to contribute to this field and that other researchers will have access to this data to provide new and further analysis. Until the next study is conducted and analyzed, it is important to use the information that is current available and to make recommendations for the future.

The existing literature reflects some variations in the results, and some consistencies. Most of the studies have found that certain symptoms, such as loneliness, social isolation, anxiety, and sadness contribute to placing a youth at a higher risk for solicitation and more risky Internet behaviors. This has been consistent across the literature, so youth with an abuse history, or who demonstrate similar symptoms, may also be at risk for sexual solicitation. However, there is some variance in the literature regarding gender. While gender is a rare topic of research in this area, in a study conducted around 2009, found that female youth were more likely to be sexually solicited online than male youth (Baumgartner, Valkenburg, & Peter, 2010). This was attributed to females using the Internet for primarily communication purposes, while males utilize the Internet more for entertainment purposes (Baumgartner et al., 2010).

Integrating this information into further research and prevention/intervention techniques may include identifying youth who are experiencing depression, anxiety, social deficits and low self-esteem and may be more likely to have negative Internet experiences. It is important to understand the characteristics associated with this vulnerability to a negative Internet based event to further promote the overall mental health of young people who use the Internet.

Among mental health professionals, depression is more frequently identified and the focus of treatment, but identification of PTSD among youth is

less often the focus. The identification of PTSD symptoms and an abuse history may not be as readily discovered during the initial contact between a youth and a mental health professional. It is important to consider the high co-morbidity of PTSD with other mental health issues and recognize how certain symptoms can play a role in youth's vulnerability to online sexual solicitation.

Previous studies have reviewed the correlation between general clinical symptomology and risky behaviors in online interactions. This study also supports the link between a youth's experiences in the real world which can lead to negative experiences in an online world. There is the potential for re-traumatization of youth between a real world experience and an online experience. Treatments of trauma and abuse have been developed in current evidence based practices. However, there is very little information or research on incorporate online issues in treatment goals and interventions into evidence based practices. This study could be one of the first steps to encourage further research into this relationship.

This study also did not find evidence that, a youth's sex was not a significant determining factor for the experience of online sexual solicitation. Rather than minimizing the experience of males in an online world, this suggests that attention should be addressed equally to males and females in investigation or intervention around online experiences with youth who have reported a trauma history. There is an equal likelihood negative experiences online for both sexes.

Regardless of sex, youth have reported a negative experience to online sexual solicitation. Those with an abuse history are more susceptible to the negative impacts of sexual solicitation. Prior research has also identified the impact of age, with younger youth being more likely to identify exposure to sexual materials as a negative experience. It would be important intervene early on in a child's development to reduce the likelihood they would be vulnerable to online sexual solicitation. As youth move into their teenage years, they become more self-conscious of their experience which could lead to minimizing their reported experiences, or they may feel they can better cope with the negative experience.

It is not surprising that differences in frequency of Internet activities among youth are associated with negative experiences in the online world. It may be projected that with the increasing access to the Internet and the increase in the amount of time a youth is engaged in an online activity would potentially increase the vulnerability of abuse youth. Increased, daily Internet usage could potentially be associated with the probability of Internet solicitation for both male and female youth. Internet harassment and solicitation may correlate with the amount of time a youth spends online. Additionally, other risk factors and the increased frequency of Internet usage could specifically be more impactful on clinical or vulnerable youth samples.

Teachers, doctors, mental health professionals, parents and others who work with youth can pay attention to strategies for building social skills, emotional regulation, communication skills, and self-esteem. These goals are primarily suited to prepare youth for success in real world experiences. The same considerations are warranted for increasing youths' skills to navigate an online world.

Professionals and adults also encounter a wide range of vulnerable or higher risk youth with learning, mental health, and developmental needs. As youth continue to develop their interpersonal skills and identity development in the real world, they also need support in learning these skills for the online world. Those who work directly with more vulnerable youth populations can provide developmentally appropriate guidance and attend to expanding this support to healthy online behavior.

Prevention and intervention programs would have a great impact, especially focused on earlier years of a youth's development. Interventions such as role-playing, discussion exercises, informational lectures, and information for parents could help reduce the likelihood of youth victimization online. While legislation and Internet designers are introducing new policies and techniques to reduce sexual solicitation and exposure to unwanted sexual materials, the real world skills are still the first line of defense. Awareness and education can make a difference in a youth's personal development. Professionals working with youth

need to be aware of the impact and consequences of online experiences,

especially when there is a mental health or behavioral condition (Wells &

Mitchell, 2014). As youth continue to develop their own real world and online

world identities and interactions, time and care must be taken in embracing youth

experiences as comprehensively as possible. It further intervention and research

is conducted, there can be hope that modern youth can be supported in a holistic

manner.

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Table 1

Demographic Characteristics for YISS-1 (n=1501)

Demographic Variable	N	%
Gender of Youth		
Male	790	52.6%
Female	708	47.2%
Don't Know/Missing	3	0.2%
Marital Status of Parent/Guardian		
Married	1182	78.7%
Divorced	154	10.3%
Single/Never Married	73	4.9%
Living with Partner	19	1.3%
Separated	37	2.5%
Widowed	35	2.3%
Refused	1	0.1%
Race of Youth		
White	1127	75.1%
African-American	154	10.3%
American Indian or Alaska Native	38	2.5%
Asian	39	2.6%
Native Hawaiin or other Pacific Islander	6	0.4%
Other	104	6.9%
Don't Know/Refused	33	2.2%
Highest Level of Completed Education in Household		
Post College Degree	330	22.0%
College Graduate	474	31.6%
Some College Education	336	22.4%
High School Graduate	320	21.3%
Not a High School Graduate	37	2.5%
Missing	4	0.3%
Annual Household Income		
Less than $20,000	119	7.9%
$20,000-$50,000	575	38.3%
$50,000-$75,000	350	23.3%
More than $75,000	347	23.1%
Don't Know	110	7.3%

Table 2

Demographic Characteristics for YISS-2 (n=1500)

Demographic Variable	N	%
Gender of Youth		
Male	738	49.2%
Female	760	50.6%
Don't Know/Missing	3	0.2%
Marital Status of Parent/Guardian		
Married	1139	75.9%
Divorced	147	9.8%
Single/Never Married	117	7.8%
Living with Partner	37	2.5%
Separated	22	1.5%
Widowed	29	1.9%
Don't Know/ Missing	9	0.6%
Race of Youth		
White	1094	72.9%
African-American	179	11.9%
American Indian, Aleut, Eskimo	26	1.7%
Asian or Pacific Islander	39	2.6%
Other	134	8.9%
Don't Know/Missing	28	1.8%
Highest Level of Completed Education in Household		
Post College Degree	333	22.2%
College Graduate	481	32.1%
Some College Education	344	22.9%
High School Graduate	305	20.3%
Not a High School Graduate	30	2.0%
Don't Know/Missing	7	0.5%
Annual Household Income		
Less than $20,000	123	8.2%
$20,000-$50,000	405	27.0%
$50,000-$75,000	355	23.7%
More than $75,000	494	32.9%
Don't Know/Refused	123	8.2%

Table 3

Descriptive Statistics for Sexual Solicitation and Abuse History for YISS-1 and

YISS-2

Variable	N	%
Sexual Solicitation (YISS-1)		
Yes	119	7.9%
No	1380	91.9%
Don't Know/Missing	2	0.1%
Abuse History (YISS-1)		
Yes	12	0.8%
No	1487	99.1%
Don't Know/Missing	2	0.1%
Sexual Solictation (YISS-2)		
Yes	105	7.0%
No	1393	92.8%
Don't Know/Missing	3	0.2%
Abuse History (YISS-2)		
Yes	20	1.3%
No	1478	98.5%
Don't Know/Missing	3	0.2%

Table 4

Pearson Chi-Square for the Relationship Between Sexual Abuse and Online

Sexual Solicitation, in the Years 2000 and 2005

	Sexual Solicitation				
Sexual Abuse	Yes	No	X^2	*Df*	*p*
Yes (2000)	0.3% (n=5)	0.5% (n=7)	18.96	1	<.001
No (2000)	7.6% (n=113)	91.6% (n=1369)			
Yes (2005)	0.7% (n=10)	0.7% (n=10)	57.34	1	<.001
No (2005)	6.4% (n=95)	92.3% (n=1380)			

Appendix A

ADLER UNIVERSITY

January 7, 2015

Dear Ms. Widuger,

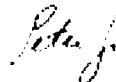The Institutional Review Board evaluated your submission.

Researcher Name: Christine Widuger
Protocol Title: Youth Populations with an Abuse History and Their Exposure to Sexual Materials Online
Protocol Number: 15-023
Chair: Dr. Cristina Cox

Submission is a [ ] First time submission, [x] Revision to a protocol, [ ] First time submission of an amendment, [ ] Revision to an amendment.

Your protocol or amendment has now received Approval. This decision means that you may proceed with your plan of research as it is proposed in your protocol, or amended protocol.

Please note that if you wish to make changes to your protocol, you must provide written notification to the IRB in advance of the changes, co-signed by your Dissertation Chair, Dr. Cox. You may not implement those changes until you have received an Approval letter from the IRB. Please feel free to contact myself or other IRB committee members should you have any questions.

Sincerely,

Peter Ji, Ph.D
Associate Professor
Core Faculty, Psy.D. Program in Clinical Psychology
Co-Chair, Institutional Review Board

Appendix B

National Data Archive on Child Abuse and Neglect

National Data Archive on Child
Abuse and Neglect (NDACAN)
Bronfenbrenner Center for
Translational Research
Beebe Hall
Ithaca, New York 1485?
t 607-255-7799 |f 607-254-2498

February 11, 2014

The Adler School of Professional Psychology
17 North Dearborn Street
Chicago, IL 60602

Attn.: Adler School of Professional Psychology

This letter certifies that the National Data Archive on Child Abuse and
Neglect (NDACAN) grants Christine Widuger permission to receive and
to analyze the following datasets:

- #159 Second Youth Internet Safety Survey (YISS-2)
- #134 First Youth Internet Safety Survey (Yiss-1)

Her work will be subject to the research integrity oversight of her
academic institution: the Adler School of Professional Psychology.

Sincerely,

Andres Arroyo
Archiving Assistant
National Data Archive on Child Abuse and Neglect (NDACAN)