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THE USE OF FACEBOOK BY ADOLESCENT GIRLS AND ITS IMPLICATIONS
FOR THE DOMESTIC SEX TRAFFICKING OF MINORS

MEGAN DUTILL
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Reviewed and approved* by the following:

Marcia DiStaso
Assistant Professor of Public Relations
Thesis Supervisor

Susan Strohm
Senior Lecturer in Advertising/Public Relations
Honors Adviser

* Signatures are on file in the Schreyer Honors College.

ABSTRACT

The purpose of this study is to research both the type and quantity of information publicly shared by adolescent girls on Facebook, specifically looking for the high-risk behaviors and vulnerabilities targeted by pimps recruiting their next victim of domestic minor sex trafficking. A detailed codebook was developed and the publicly available Facebook profiles of 400 teenage girls in the Tampa Bay, Fla. area were coded accordingly. Frequency tests, bi-variate correlations and one-way ANOVAS were run to analyze the data and detect patterns and significant relationships.

The study found that a majority of girls displayed provocative behaviors and openness/emotional availability, nearly half engaged in other high-risk behaviors such as swearing or evidence of alcohol, drugs or family dysfunction, and one quarter displayed low self-esteem. A significant relationship was found between each of those three variables, indicating that girls who are vulnerable in one area tend to be vulnerable in several different areas. A significant relationship was found between the privacy level and the degree of openness and emotional availability displayed. Significant relationships were also found between the number of friends and low-self esteem as well as the number of friends and the degree of openness and emotional availability displayed. Finally, this study recommends specific behaviors for teens and their parents and suggestions for fostering awareness of domestic minor sex trafficking in social media.

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INTRODUCTION

Today, slavery in the United States has a new face. It is rarely the face of someone picking cotton or working in forced manual labor, as is so often imagined. Instead, this face is of a young girl wearing too much make-up and being forced to sell her body, over and over. Sometimes it's the face of a school girl by day but prostitute by night.

Tragically, domestic minor sex trafficking is a booming industry in the United States (U.S. Department of Justice, n.d., para. 2). It is found in every state, in both wealthy suburbs and crime-infested city neighborhoods, and it exploits everyone from runaways to successful student athletes with good backgrounds and caring families (Barrows, 2008). No one is immune.

And while traffickers still employ many of their old strategies and target girls in places like bus stops, malls and schools, they have also adapted to the digital age and are researching, identifying, recruiting and selling victims online and through social media (Kotrla, 2010; McClain & Garrity, 2011). Yet social media is often a place where teens are not monitored and are given the freedom and tools to experiment with their identity and how they want to appear to others (De Souza & Dick, 2009; Dominus, 2012; Patchin & Hinduja, 2010). Such websites are therefore very conducive to teens being careless with their privacy or information and unintentionally projecting the specific vulnerabilities that traffickers look for. These qualities include sexual curiosity and provocative photos and behaviors, risky behaviors (such as family dysfunction, drugs or

aggressive language), low self-esteem and openness/emotional availability (Smith, 2009; Williamson & Prior, 2009).

Much research has already been done on the vulnerabilities that pimps look for and target as well as the ways that teens interact with and use social media platforms. This study aims to help fill the gap at the intersection of this research by compiling a codebook that specifies the vulnerabilities and behaviors that traffickers target and the way those may be displayed on Facebook. The purpose of this research is to understand the prevalence of each of these behaviors among teenage girls and provide suggestions for specific ways in which girls can protect themselves online.

LITERATURE REVIEW

Domestic Minor Sex Trafficking

It has only been over the past 15 years that the issue of human trafficking, and specifically sex trafficking, has received significant national attention. It was previously believed that sex trafficking existed mostly in foreign countries, and if it was in the United States, it consisted of importing foreign women into the U.S. sex industry (Shared Hope, 2007). However, neither of those assumptions are true, and the tragedy of sex trafficking hits close to home. Sex trafficking, appropriately defined by President Obama as “modern-day slavery” (CNN, para. 3), is in fact a “lucrative” industry in the United States (U.S. Department of Justice, n.d., para. 2). And according to the U.S. State Department, most victims – adults and children – are American citizens (2011).

Youth are especially vulnerable to this crime, and the problem is even more widespread than one might think. Recent research indicates that most adult women engaging in prostitution were first trafficked as minors (Kotrla, 2010). The FBI notes, “Among children and teens living on the streets in the United States, involvement in commercial sex activity is a problem of epidemic proportion” (Walker-Rodriguez & Hill, 2011, para. 8). Estimates suggest that at least 100,000 and as many as 300,000 children are prostituted each year in the United States (Estes & Weiner, 2001; Shared Hope, 2009), and the numbers could be even higher. Ernie Allen, president and CEO of the International Centre/National Center for Missing and Exploited Children says that

domestic minor sex trafficking (DMST) is “viewed as the single most underreported, under-identified, and most severe form of commercial sexual exploitation that children are facing today” (as cited in Shared Hope, 2009, p. 4). Due to the covert nature of the crime, many cases of child sex trafficking are either unreported or not properly identified (Shared Hope, 2007).

As defined by the 2009 National Report of Domestic Minor Sex Trafficking, DMST is “the commercial sexual exploitation of American children within U.S. borders,” which includes acts such as “prostitution, pornography, and/or stripping” (Shared Hope 2009, p. 4). There is no place immune to this crime: estimates suggest that thousands of youth in every state are either involved in or at-risk for trafficking (Barrows, 2008).

According to experts, one of the largest factors driving the demand of DMST in the United States has been the rise of internet pornography (Remensnyder, Kregg & Berg, 2005). “Regular people get involved in internet porn and they develop sexual fetishes and paraphilia,” says Dale Yeager, CEO of the security consulting and training firm Seraph and a criminal behavior analyst who specializes in sex crimes. He adds:

It really drives people, and it’s a factor because it’s so available now. Just like with drugs, they get to a certain point where they need more stimulation. And they start expanding into swinger groups, which expands out into bringing in the children. It’s a well-established profile (personal communication, March 11, 2013).

Tragically, traffickers (pimps) find young victims to be easily accessible. Those most at risk for trafficking include youth – typically young girls – who have run away or been kicked out of their homes, those who are homeless or in foster care, those with

dysfunctional families and those with a history of abuse (Clawson, Dutch, Solomon & Goldblatt Grace, 2009; Kortla, 2010; Williamson & Prior, 2009). Other “high risk” behaviors and vulnerabilities that predators tend to target include youth with low self-esteem, troubled backgrounds, impoverished families and youth demonstrating sexual curiosity or who have made poor sexual choices (Dombrowski, LeMasney, Ahia & Dickson, 2004; Mitchell, Finkelhor & Wolak, 2001; Smith 2009; Williamson & Prior 2009).

But it’s not just runaways or the children that are typically thought of as “troubled” or “at-risk” who are targeted, as Yeager points out:

It also happens in the suburbs of the mainline. The daughter can be suburban and very wealthy, but if Daddy’s not around and Mommy is not emotionally connected to the daughter, she seeks out adults who listen to her. I’ve interviewed girls and boys who have been lured away on the internet by adults in sexual relationships, and I’ve interviewed perpetrators. The kids all say, ‘Well, Bobby listened to me, he would let me talk and treated me like a person.’ And the perpetrators said, ‘It’s not hard, all you have to do is listen and ask questions.’ So there’s this desire on the part of the child/adolescent for some kind of connection to an adult that will listen and pay attention to them, and that becomes a vulnerability. A lot of times, these children who are considered to be abducted really aren’t abducted – they are invited to come along. The girls are complicit, but that doesn’t mean they understand what they’re doing (personal communication, March 11, 2013).

Facebook

Facebook and social media sites are increasingly playing a role in DMST (Kotrla, 2010; McClain & Garrity, 2011). Traffickers have always frequented the places where girls hang out and have targeted the girls there – research shows they typically approach girls in bus stops, schools, street corners, malls, train stations, homeless shelters, juvenile detention centers and even their own homes (McClain & Garrity, 2011; Williamson & Prior, 2009). Therefore, it makes sense that traffickers would now be using prominent social media sites to find potential victims and initiate relationships with them. Citing a keynote address by Andrew Oosterbaan, Chief of the Child Exploitation and Obscenity Section in the U.S. Department of Justice, Kotrla (2010) states, “Not only do traffickers advertise children online for sexual purposes through hundreds of Web sites, but they search for victims through social networking sites such as Facebook and MySpace” (p. 183).

This has shown up in recent news as well. And although the number of prominent news stories cannot necessarily provide an accurate picture of how often this occurs, the reports do show that some predators troll social networking sites (Hayes, 2012; Mason, 2012; McMahon, 2012; Popkin, 2012). A recent FBI report on trafficking tells one such story:

Strom and his UGC associates would troll social networking sites, looking for attractive young girls. After identifying a potential victim, [gang members] would contact her online using phony identities...complimenting her on her looks, asking

to get to know her better, sometimes offering her the opportunity to make money as a result of her looks. (2012)

According to the FBI, the average age of victims of DMST is 12-14 years old (Walker-Rodriguez & Hill, 2011). And the use of Facebook by preteens and young teens has skyrocketed in recent years, with *Consumer Reports* recording more than 7.5 million users under age 13 – which is actually illegal according to Facebook’s policy (Dominus, 2012; Facebook, 2012). A study by the Pew Research Center found that “Facebook is the dominant social media site among teens, as 93% of teen social media users have a Facebook account” (Lenhart, Madden, Smith, Purcell, Zickuhr & Rainie, 2011, p. 7).

This concern over online sexual predators and teens' careless internet habits is hardly new; it has garnered much popular and media attention and has been a topic of debate for more than a decade. One journal article, citing research from 2008, even states the opposite view: “We now know that sexual predators do not typically troll social network services in search of victims” and that they instead use more “direct methods such as online chat, email, and instant messaging” (Harris, 2010, p. 76).

However, it is important to recognize that in the world of social media, research and even Internet habits may become quickly outdated. For example, the Facebook chat feature was created in 2008 (“Hits and Misses,” 2012). And in 2008 alone, the number of users grew by 85% to 150 million users (“2008 Social Media Statistics”). As of November 2012, it was estimated that there were 1 billion Facebook users and 600 million mobile users – which is many more mobile users during 2012 than overall users in 2008 (“How Many People Use the Top Social Media?” 2012).

As a social tool, Facebook allows users to share information such as interests, relationship status, religious and political views, and photos. Users can email each other through the Facebook message system – regardless of whether they are “friends” on the site – and can instant message and video chat with friends in addition to posting on each other’s profiles and commenting on their activities or photos.

As social networking sites were created to foster conversations and relationships, it makes sense that choosing girls and interacting with them through Facebook seems to be a first step for many pimps (Kotrla, 2010; Walker-Rodriguez & Hill, 2012). Few traffickers are complete strangers to their victims. Research shows that most pimps "groom" the girl by befriending her, giving her gifts, and often becoming romantically involved in order to psychologically and emotionally manipulate her (Kotrla, 2010; Smith, 2009; Williamson & Prior, 2009; Wolak, Finkelhor & Mitchell, 2004; U.S. Department of Health and Human Services, n.d.). Thus, the problem may be less that adolescents are posting identifying information online that could lead to a kidnapping as it is that social networking sites can be a vehicle to foster inappropriate relationships.

A 2009 study by Noll, Shenk, Barnes and Putnam researched online victimization of teenage girls and found that 40% of the sample received sexual solicitations and 26% of those activities continued offline. The study also found that the way girls presented themselves online (such as provocatively) was associated with sexual advances through the Internet, as well as real world victimization – an association that has been corroborated by several other research studies (see Angwin & Steinburg, 2006; Dowdell, Burgess & Flores, 2011; Mitchell et al., 2001).

One limitation in researching online victimization is that, as noted above, most predators are skilled manipulators. Many of the girls become emotionally attached and see the progression of the relationship and sexual advances as romantic and something that is desirable, not unwanted behavior to be reported (Wolak, Finkelhor, Mitchell & Ybarra, 2008).

Finally, the teenage years are a period when adolescents may be most vulnerable in terms of figuring out their own identities and how they want to present themselves, online and offline (De Souza & Dick, 2009; Dominus, 2012; Patchin & Hinduja, 2010). As Patchin and Hinduja note, “Creating an online persona through customized textual, visual and aural electronic content allows youth to ‘display the selves they are, the selves they wish to become, and the selves they wish others to see’ (Stern, 2002, p. 266)” (2010, p. 199). Likewise, these teens may not realize how others could interpret their profiles or online comments and “may not, from a developmental perspective, possess the social sophistication necessary to field and ward off sexual advances in ways that protect them from sexually explicit suggestion” (Noll et al., 2009, p. 5).

Teens’ online privacy habits and views have been previously studied, and findings from research studies show that most users display “intimate portraits of a person’s social or inner life” (Gross & Acquisti, 2005, p.2) along with identifying information such as full names, facial photos, email address, school, instant messaging screen name, and hometown (Hinduja & Patchin, 2008; Saksrud, Ólafsson & Livingstone, 2013; Taraszow, Aristodemou, Shitta, Laouris & Arsoy, 2010). Taraszow, et al. also notes that young users who display important identifying information will also tend to disclose key contact information. In addition, while many adolescents set their Facebook profiles to “private,”

meaning only those accepted as “friends” can view most of their information, young users tend to accept complete strangers as friends, thereby nullifying some of the privacy protection (Lenhart & Madden, 2007; Livingstone, 2008).

In spite of the media hype, some research studies indicate that simply displaying private information does not lead to risk of online/offline victimization, but it is rather specific “high-risk” internet behaviors that are concerning. These behaviors include having public profiles, communicating with people known exclusively online, talking about sex/sexual behavior, viewing pornography, acting aggressively, and having a lot of “friends” on those profiles (Baumgartner, Valkenburg & Peter, 2010; Mitchell, Finkelhor & Wolak, 2007; Wolak et al. 2008).

RESEARCH QUESTIONS

As the literature review documents, much research exists about the individual aspects about: Characteristics of youth at risk for trafficking, strategies employed by pimps, and Internet privacy and teenagers' evolving Internet and social networking habits. This thesis aims to provide research at the intersection of these studies to understand the vulnerabilities teenage girls intentionally or unintentionally project online, which may then be sought for and exploited by traffickers. The following research questions were explored:

RQ1: *How much personal information do adolescent girls have publicly available on Facebook?*

RQ2: *How much provocative behavior is displayed by adolescent girls on Facebook?*

RQ3: *How much risky behavior is displayed by adolescent girls on Facebook?*

RQ4: *How much self-esteem and openness is displayed by adolescent girls on Facebook?*

RQ5: *Are there relationships between provocative behavior, risky behavior, self-esteem and openness displayed by adolescent girls on Facebook?*

RQ6: *Is privacy level related to the number of provocative behaviors displayed by adolescent girls on Facebook?*

RQ7: *Is privacy level related to the number of risky behaviors displayed by adolescent girls on Facebook?*

RQ8: *Is privacy level related to the amount of self-esteem and openness displayed by adolescent girls on Facebook?*

RQ9: *Is number of friends related to the number of provocative behaviors displayed by adolescent girls on Facebook?*

RQ10: *Is number of friends related to the number of risky behaviors displayed by adolescent girls on Facebook?*

RQ11: *Is number of friends related to the amount of self-esteem and openness displayed by adolescent girls on Facebook?*

METHODS

To research online vulnerabilities of adolescent girls, a comprehensive content analysis was conducted of the publicly available content on 400 Facebook pages. The sample consisted of middle school and high school girls from the Tampa Bay, Fla., area. The goal was to analyze both the nature and the amount of publicly available information. Only information made public was viewed and coded, and each profile was additionally coded for the level of privacy. Profiles were coded for public content found on the information page, photo page, and “wall,” a homepage where one can post status updates, photos, and interact with friends.

The study used a snowball sample, starting with one girl in St. Petersburg and using her publicly available list of Facebook friends, and those friends’ lists, to find other eligible teens’ profiles to code. To ensure girls were within the target age range and location, only those who listed a Tampa Bay area school, with no evidence of previous graduation, were used in the study.

The Tampa Bay area was selected as a way to focus on the profiles of girls who live in a particularly high-risk area. As of September 2012, Florida was “ranked third in the U.S. for the sex slave population” (Johnson, para. 7). Williamson and Prior note that “Environmental factors that influence child trafficking include the existence of available adult sex markets in a community and having a community with a large population of transient males such as military personnel, truckers, tourists, and conventioners” (2009, p. 47). Because the Tampa Bay area is a tourist destination with a large adult nightlife scene, it is likely to be especially vulnerable to DMST.

Likewise, the middle and high school years were chosen to see how girls in their early to mid-teens – the ages particularly susceptible to trafficking – present themselves online. Although boys are also trafficked, Clawson et al. notes that “there is no clear consensus on the number of girls versus boys exploited through prostitution” and “the differential treatment of boys and girls, coupled with the differences in the circumstances under which they prostitute (including location), make these statistics extremely difficult to interpret” (2009, para 19). Additionally, the research thus far on DMST has been overwhelmingly focused on females. Due to the lack of research on the factors that lead to young boys’ involvement in sex trafficking, this thesis will focus only on girls.

The coding scheme used in this study is based on a content analysis of randomly generated MySpace pages by Hinduja and Patchin (2008). That research sought to provide a complete overview of the type of information youth were posting online and coded for personal details including full name, birthday, school, and contact information, as well as high-risk behavior such as evidence of alcohol, tobacco, marijuana or other drug use, number of pictures, pictures in swimsuit/underwear, swear words in profile and number of friends. Because MySpace and Facebook are similar social media sites in terms of audience, purpose and content shared, the coding scheme was considered to be valid for the purposes of this study.

The categories above provided the basic codebook for this study. Additional categories were included that related specifically to Facebook profiles (such as privacy controls and relationship status) and other vulnerabilities identified in trafficking victims (such as a measure of self-esteem, family dysfunction and provocativeness of photos).

The items in the codebook (Appendix A) were drawn from the previous review of literature and can be divided into four categories: privacy and personal information, provocative behavior, high-risk behavior, openness and self-esteem.

1) Privacy and Personal Information

Past research suggests that the type and amount of personal information available is not as dangerous as specific high-risk behavior online (Baumgartner, Valkenburg & Peter, 2010; Wolak et al. 2008). However, personal information was coded in this study to both provide demographic information and because such information can indicate a lack of privacy as well as provide a good sense of who the person is – their age, school, interests and so on. This is all information that a predator could use to understand and tailor interactions with them.

The privacy level of each page was coded as a way to immediately understand how much personal information was available on any given profile as well as the extent to which each subject went to protect themselves and their information. This was measured on a scale of 1-18. The scale is an exhaustive list of every possible privacy combination of “private, limited or fully public” for the Facebook information page, wall, and photo page. Each number on the scale corresponds to a specific combination (for example, 6 = full information, limited photos and private wall).

After coding the privacy level, the codebook lists specific categories of personal and contact information that could be listed on a Facebook page. Much of this section requires researchers to choose “yes” or “no” depending on whether the profile displays this information. For statistical purposes, 1 = yes and 2 = no. This section is included to provide a general background of the person as well as understand what personal details

are immediately, and publicly, listed on their pages. The categories include school, graduation year, current city, hometown, email address, phone number, instant messaging screen name or other social network handle, sexual orientation and personal website listed. Other categories are coded according to exhaustive lists where a number corresponds to a specific option, such as birthday – 1=birthday listed with year; 2=month and day listed; 3=no birthday listed. Those categories include name, work, relationship status and whether high school or middle school is listed for demographic purposes.

2) Provocative Behaviors

While Hinduja and Patchin (2008) coded for photos in swimsuits/underwear in their study, this study has made provocativeness and sexual behavior a separate and more elaborate section. Other research notes that youth who demonstrate sexual curiosity or poor sexual choices may be more at risk, and that girls who present themselves provocatively online receive more online sexual solicitations and offline victimization (Dombrowski, LeMasney, Ahia & Dickson, 2004; Mitchell, Finkelhor & Wolak, 2001; Noll, Shenk, Barnes & Putnam, 2009; Smith 2009; Williamson & Prior, 2009). Because an FBI report noted that gang members looked specifically for attractive girls, it is reasonable to infer that predators may use bikini shots or other such revealing photos to analyze a potential victim's body (FBI, 2012). Therefore, this section analyzes the sexual nature and provocativeness of available photos and the presence of sexual language.

The section contains yes/no questions and scalar questions measuring the level of provocativeness of the profile and cover photo. Yes/no questions indicated evidence of pornography as well as sexual language on their information page, photo comments or wall. All publicly available photos from the last year were looked at and coded for photos

of her in a swimsuit/underwear, appearing nude, in the bedroom, kissing, or appearing otherwise sexual in nature. The type of profile photo was also noted, and the options listed were: a photo without the girl, a photo featuring her alone, featuring her with friends or featuring her with a boy. Another column noted the overall number of photos in all publicly available albums, to get a sense of how many images were available and how often she posted pictures.

This section also measured the provocativeness of the profile and cover photos, since those photos are always public and it is the first part of a profile that a viewer sees. The photos were rated on a scale of 1-5, rated according to the dominance of body/chest/lips in photos and various sexual poses. The scale ranges from nonsexual photos to nude photos or photos suggesting nudity. The scale is below:

Level 1 = nonsexual object/animal; girl with large group of friends (posing nicely); headshot; nonsexual pose with no cleavage/midriff/thigh showing; athletic shot

Level 2 = Some cleavage/midriff/thigh but can see girl's whole face and not the point of the photo; girl with boy; nonsexual photo where the body is the focus only in the cropped thumbnail image but not in album

Level 3 = Photos with body contorted to show off chest/hips/legs; photos with heavy/seductive makeup; otherwise normal photos with pouty lips; kiss on the cheek; suggestive tongue; middle finger

Level 4 = Photos with face obstructed/cropped to focus specifically on lips/chest/body; photos with significant cleavage/midriff/thigh (focus of picture); sexualized cartoon character; kissing; photos laying on bed; photos in swimsuits

Level 5 = Photos suggesting nudity; nude photos; two people in bed; explicitly sexual poses; making out; photos with major amounts of underwear visible

3) Risky Behaviors

The high-risk behaviors coded by Hinduja and Patchin and adopted for this study have been previously identified as indicators of troubled backgrounds or youth who have made poor choices, such as evidence of alcohol, tobacco or drugs. Such a person may be at more risk for trafficking (Williamson & Prior, 2009). Likewise, swearing or bullying language suggests someone who is aggressive, which has been identified as another dangerous online behavior (Baumgartner, Valkenburg & Peter, 2010; Mitchell, Finkelhor & Wolak, 2007; Wolak et al. 2008). Hate/bullying language, indicating someone engaging in online aggression, has been defined by Ybarra and Mitchell (2004) as “making rude or nasty comments; or harassing or embarrassing someone with whom the youth was mad” (p. 1308). Finally, the author identified use of the Facebook “Places” feature as a high-risk behavior, as it allows users to post their exact geographical location and who they are with – a feature that could be conducive to offline stalking.

This section of the codebook was made up entirely of yes/no questions, with the exception of a column for the number of Facebook “friends” each girl had listed. Categories included comments or photos of alcohol use, tobacco use, and marijuana use; swear words posted by the subject or friends; use of the Facebook Places feature and hate/bullying language by the subject or others.

4) Self-esteem and Openness

Youth at the highest risk for trafficking are those without a strong family structure. While this certainly includes runaways and children in foster care, it also includes

children with dysfunctional families or poor relationships with their parents (Kortla, 2010). Because most pimps start by drawing the girl into some kind of relationship, often romantic, easy targets are those who are emotionally available and/or have low self-esteem (Mitchell, Finkelhor & Wolak, 2001; Smith, 2009). Some online indicators of this could include girls who post negatively about their parents, seem to be desperately looking for love, or – in the case of Facebook – simply splash their emotions and details of their life all over their status postings, looking for affirmation and telling anyone exactly what is going on and what they feel about it. The word “openness” was chosen to describe both emotional availability and the degree of information and personal disclosure posted on a Facebook profile. This section of the codebook measures self-esteem, evidence of family dysfunction and the amount of openness/disclosure on each profile.

Evidence of family dysfunction is a simple yes/no question and both of the other questions are scalar. To measure self-esteem, this study used the method by Forest and Wood (2012), which found a negative correlation between the number of negative status updates in the last 10 and low self-esteem. Therefore, this was on a scale of 0-10, depending on the number of negative status updates. If the subject’s status updates were private, they were coded as 0.

The degree of openness/disclosure was coded on a scale of 1-5 that incorporated the amount of static information available in the subject’s “information” page or wall as well as the number of available status updates. The levels ranged from no personal information available to detailed static information on the information page and recent

status updates about daily life/emotions (as opposed to posting song lyrics, for example).

The scale is as follows:

In looking at this girl's page, do you get a sense of who she is, information about her likes, personality, and life? 1 2 3 4 5

Level 1 examples: no personal information

Level 2 examples: limited information section and/or limited wall

Level 3 examples: (at least one): full information, short "about me" section, 1-3 status updates in the last 10 with information about daily life/emotions

Level 4 examples: long, detailed "about me" section OR four or more recent status updates in the last 10 with information about daily life/emotions

Level 5 examples: long, detailed "about me" section AND more than three recent status updates with information.

In addition to these categories, the codesheet also recorded identifiers to ensure that no subject was coded twice. The individual identifiers were not linked with the data in statistical analysis. The codebook itself contained detailed instructions on how to find and code every section, as well as lengthy explanations of what each level of a scale included for all scale questions. The codebook was refined and edited throughout the intercoder training period for clarity, and was provided to the intercoder before the rest of the 10% sample of pages were coded.

All coding was conducted by the author, but a second coder was trained to establish intercoder reliability and clarify the codebook as needed. A total of 40 Facebook pages were coded by both and compared using ReCal intercoder reliability web service

(Freelon, in press), with an overall agreement of 81%. However, a majority of the individual variable pairs had an agreement rate of 90% or higher.

It is important to note that one of the limitations of this study, in terms of intercoder reliability, is that it was conducted on social media. Facebook is being constantly updated, so categories such as the number of friends, number of photos, number of negative status updates in the last 10, the provocativeness of the profile photo (frequently changed) and even the privacy level (regularly changed by Facebook) is almost guaranteed to never be the same unless it is coded at precisely the same time. As expected, the percentage of agreement for each of those categories was low, and therefore brought the percentage of overall agreement down significantly.

Analysis

During the coding process, information was recorded using the codesheet in Microsoft Excel. For purposes of analysis, all responses were recorded as numbers, for example, yes=1 and no=2. The data was then imported into SPSS for statistical analysis, formatted and carefully checked to make sure there was no “missing” or incorrectly entered data. Analyses run using SPSS included frequencies, bivariate correlations, and one-way ANOVAS.

RESULTS

For an understanding of the girls in this study, frequencies were run to understand the demographics (see Table 1). Most (83%, n=332) went by their full, real name on Facebook (i.e., Susan Smith), and 85% were in high school (n=341). Almost all did not publicly list a birth date (90.8%, n=363), while 62% also did not list a relationship status (n=247). Of those who did, more girls identified as “single” (21.3%, n=85) than “in a relationship” (17%, n=68).

On average the girls in this study posted 139 photos (SD=184.8) and had 990 friends (SD=661.4).

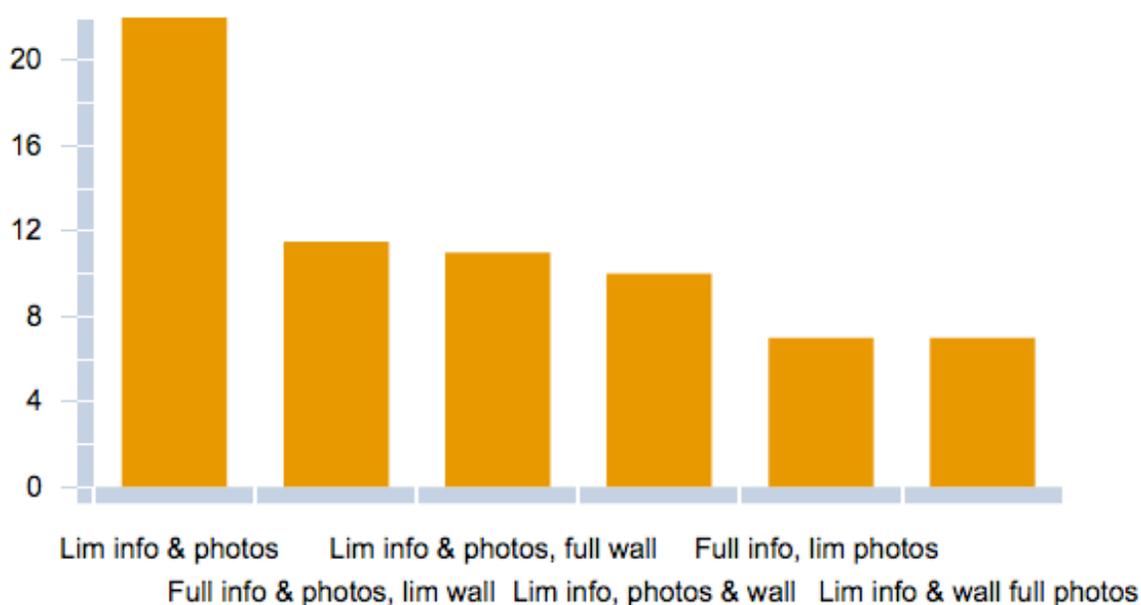
Name	Full name: 83%, n=332 First name only: 9.3, n=37 Pseudonym: 7.8%, n=31
Middle School	14.5%, n=58
High School	85.3%, n=341
Birthday listed	With year: 1%, n=4 Without year: 8.3%, n=33 No birthday listed: 90.8%, n=363
Relationship status	Single: 21.3%, n=85 In a relationship: 17%, n=68 Not listed: 61.8%, n=247
Average number of photos available	M=139.22 SD=184.81
Average number of friends	M=989.81 SD=661.44

Due to Facebook’s automatic privacy restrictions for minors, and their own privacy controls, there was no profile coded that was fully public. Only 3.5% of profiles (n=14) were fully private, which meant that nothing was displayed except name, school, and possibly gender and/or profile/cover photo. In addition, the thumbnail profile photo

could not be clicked to be enlarged. Thus, 96.5% of profiles had varying but limited amounts of information and/or photos that were publicly available (n=386).

The most common privacy setting was to have a page with limited “information” and limited photos with no wall available (22%, n=88); followed by full information and full photos with a limited wall (11.5%, n=46); limited information and photos with a full wall (11%, n=44); limited information, limited photos and limited wall (10%, n=40); full information and limited photos, no wall (7%, n=28) and limited information, full photos and limited wall (7%, n=28). The other combinations had much lower percentages.

Figure 1: Percentage of Most Frequent Privacy Options

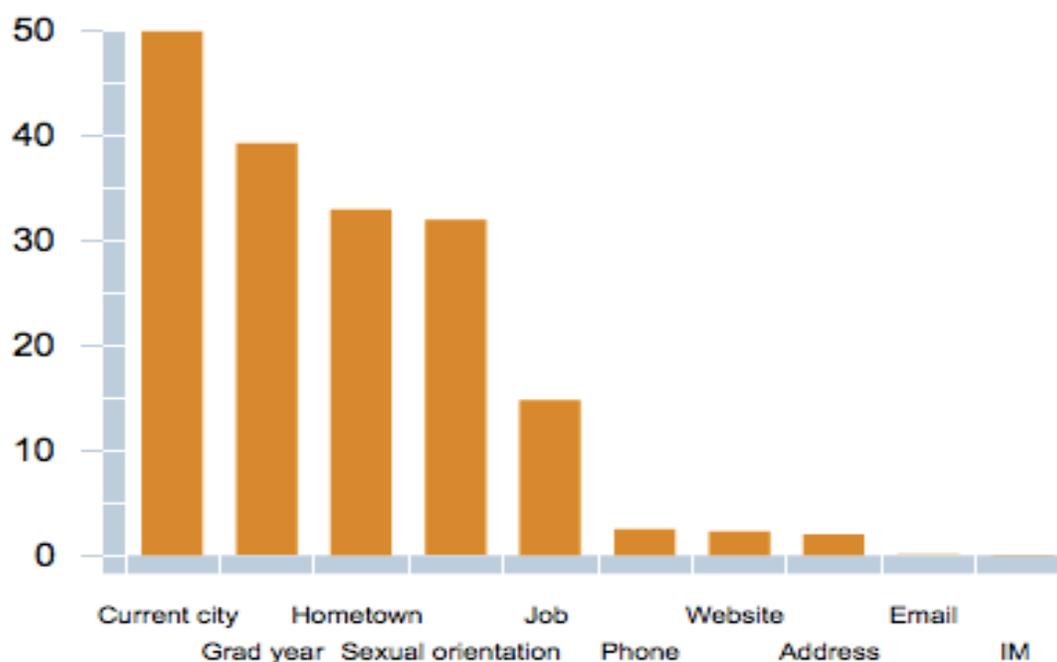


RQ1: *How much personal information do adolescent girls have publicly available on Facebook?*

After creating a personal information scale by adding each variable (where “1” indicates existence of the variable and “0” indicates that it is not displayed) and running descriptive statistics, it was found that the mean number of pieces of information displayed was 2.78, out of a possible 11 (SD=1.26, n=400). The minimum amount was 1, and the maximum amount of categories displayed on any profile page was 9. The 12 items included: School, work, graduation year, current city, hometown, email address, phone number, instant messaging screenname, address, sexual orientation and personal website.

In studying the amount of personal information listed, 100% of girls listed their school. However, as noted above, that was a requirement of this study to ensure that girls were in the target age range and location, and therefore is not included in the following figure. It was found that the next most common thing to display was their current city (50%, n=200), followed by their graduation year (which can provide an indicator of age) (39.3%, n=157), hometown (33.8%, n=135) and sexual orientation (32%, n=128). While contact information may have been listed, it was not publicly available for the vast majority – only 10 girls (2.5%) listed their phone number, which was the most common piece of contact information. The least common, an instant messaging screenname, was only displayed by 2 girls (.08%).

Figure 2: Frequency of Personal Information Disclosure



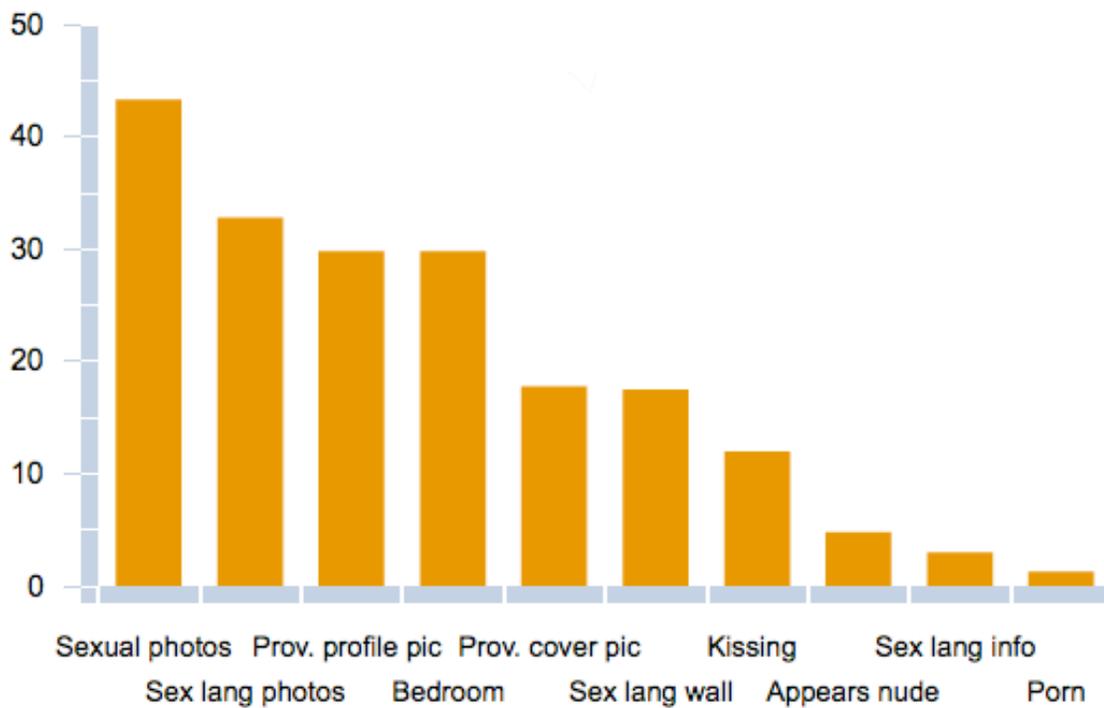
RQ2: *How much provocative behavior is displayed by adolescent girls on Facebook?*

After creating a provocative behavior scale by adding each variable (where “1” indicates existence of the variable and “0” indicates that it is not displayed) and running descriptive statistics, it was found that more than 75% of girls ($n=302$) displayed at least one kind of provocative behavior. The mean number of types of provocative behaviors displayed was 3.02, out of a possible 10 ($SD=1.74$, $n=400$). The maximum number displayed was 8 and the minimum was 0.

The most common behavior displayed was posting “other sexually suggestive pictures” (43.3%, $n=173$), a category so named because the photos did not fall into any of the existing categories (kissing, underwear, etc). These photos encompassed everything from contorted poses or photos revealing a lot of cleavage/midriff/thigh to two people in

bed in varying degrees of explicit poses. This was followed by sexual comments, posted by the girl or friends, on her photos (32.8%, n=131). The presence of provocative profile pictures (29.8%, n=119) was tied with photos clearly taken in the bedroom (29.8%, n=119). The rest of the behaviors include a provocative cover photo (17.8%, n=71), sexual comments on the Facebook wall (17.5%, n=70), kissing photos (12%, n=48), photos suggesting nudity (4.8%, n=19), sexual language on the Facebook information page (3%, n=12) and evidence of pornography (1.3%, n=5).

Figure 3: Frequency of Provocative Behaviors

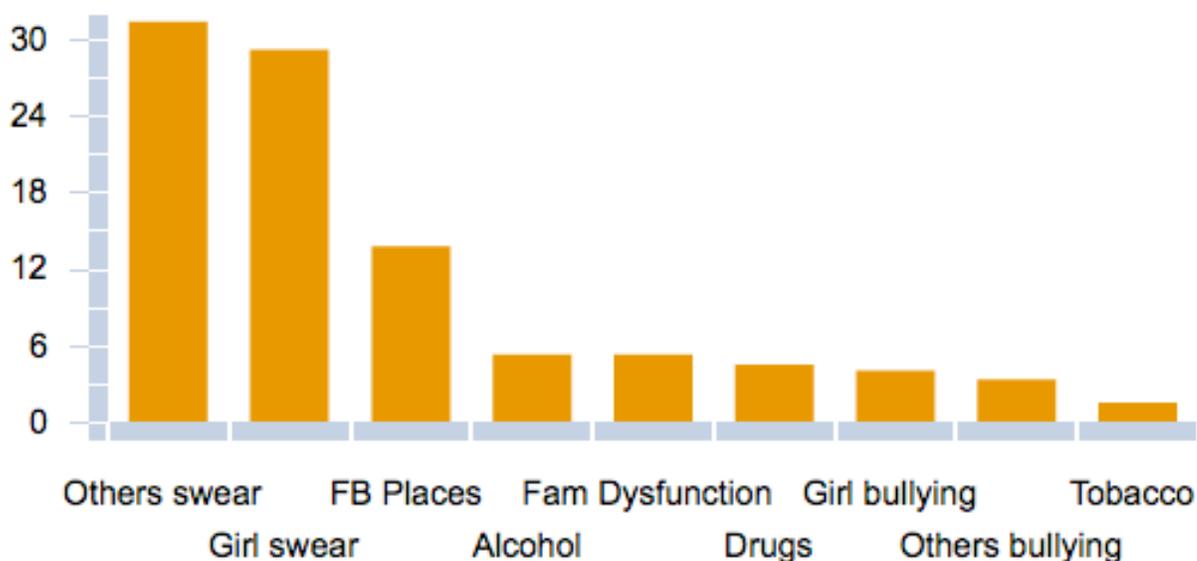


RQ3: *How much risky behavior is displayed by adolescent girls on Facebook?*

After creating a risky behavior scale by adding each variable (where “1” indicates existence of the variable and “0” indicates that it is not displayed) and running descriptive statistics, it was found that 46% of profiles (n=187) displayed at least one type of risky behavior. Out of a possible score of 9, the mean was 2.1 (SD=1.25, n=400). The maximum number of categories found on any one profile was 8 and the minimum was 0.

The most common behavior found was comments by friends on a page that included swear words (31.5%, n=126), closely followed by the account owner swearing (29.3%, n=117). The next most common behavior was posting a location by using Facebook Places (13.8%, n=55). Evidence or suggestion of alcohol and family dysfunction were tied at 5.3% (n=21) each. This was followed by the evidence or suggestion of drug use (4.5%, n=18), hate/bullying language by the girl (4%, n=16), hate/bullying language directed at the girl (3.3%, n=13) and evidence or suggestion of tobacco use (1.5%, n=6).

Figure 3: Frequency of Risky Behaviors



RQ4: *How much self-esteem and openness is displayed by adolescent girls on Facebook?*

After creating a self-esteem/openness scale by adding each variable (where “1” indicates existence of the variable and “0” indicates that it is not displayed) and running descriptive statistics, it was found that 24.3% (n=97) posted negative status updates, indicating low self-esteem, and 55.5% (n=222) scored a “3” or higher on the 5-point scale of openness and disclosure. While 38.8% (n=155) of girls showed just one of the behaviors on their Facebook pages, 20.5% (n=82) demonstrated both. The mean was 1.34 out of a possible score of 2 (SD=.48, n=400).

RQ5: *Is there a relationship between provocative behavior, risky behavior, self-esteem and openness displayed by adolescent girls on Facebook?*

A bivariate correlation was run to detect any relationships between the four variables. All of the relationships were found to be significant at the $p < .001$ level (see Table 2). The strongest relationship found existed between low self-esteem and the amount of openness displayed on a profile ($r = .557$, $n = 400$, $p \leq .000$), a positive and strong indication that someone who is very open online is also more likely to display negative Facebook statuses and have a lower self-esteem. The next strongest relationship was found between risky behavior and openness displayed ($r = .439$, $n = 187$, $p \leq .000$), which indicates a moderately strong and positive correlation between the level of emotional openness displayed on a Facebook profile and the number of online risky behaviors that are engaged in. A strong relationship was also found between low self-esteem and provocative behaviors ($r = .357$, $n = 301$, $p \leq .000$). Likewise, a moderately strong and positive relationship was found between low self-esteem and risky behaviors displayed ($r = .330$, $n = 187$, $p \leq .000$). A similar positive correlation was found between openness and provocative behaviors ($r = .328$, $n = 301$, $p \leq .000$). Finally, a fairly weak but still statistically significant correlation was found between risky behavior and provocative behavior ($r = .298$, $n = 173$, $p \leq .000$) and is also positive.

Self-esteem and Openness	R=.557, n=400
Risky Behavior and Openness	R=.439, n=187
Self-esteem and Provocative Behavior	R=.357, n=301
Self-esteem and Risky Behavior	R=.330, n=187
Provocative Behavior and Openness	R=.328, n=301
Risky Behavior and Provocative Behavior	R=.298, n=173

RQ6: *Is the privacy level related to the number of provocative behaviors displayed by adolescent girls on Facebook?*

After running a one-way ANOVA, it was found that there was not a statistically significant relationship between the privacy level and the number of provocative behaviors displayed. There is a trend towards adolescents who display limited public information being slightly more likely to also display provocative behaviors ($M=3.03$, $SD=1.75$, $n=4$) than those with private profiles ($M=2.00$, $SD=.82$, $n=297$), but the difference is not enough to be significant, which may be due to the small sample size.

RQ7: *Is the privacy level related to the number of risky behaviors displayed by adolescent girls on Facebook?*

A one-way ANOVA analysis found that there was not a statistically significant relationship between the privacy level and the number of risky behaviors displayed on a Facebook page.

RQ8: *Is the privacy level related to the amount of self-esteem and openness displayed by adolescent girls on Facebook?*

A one-way ANOVA found that there was no significant relationship between the privacy level of Facebook profiles and the level of self-esteem (as determined from negative status updates). However, a significant relationship was found between the privacy level and the degree of openness displayed ($F(1, 398) = 44.55$ $p \leq .005$). This indicates that a girl with more public settings on her profile ($M=2.47$, $SD=.825$) is more likely to also openly share details of her life than one whose profile is completely private ($M=1$, $SD=.00$).

RQ9: *Is the number of friends related to the number of provocative behaviors displayed by adolescent girls on Facebook?*

After creating a provocative behavior scale by adding each variable (where “1” indicates existence of the variable and “0” indicates that it is not displayed) and a scale from 0-6 for the number of friends (where “0” = not listed, “1” = 1-499 friends, “2”= 500-999 friends, and so on), a bivariate correlation was run. There was not a statistically significant relationship between the number of Facebook friends and the number of provocative behaviors displayed.

RQ10: *Is the number of friends related to the number of risky behaviors displayed by adolescent girls on Facebook?*

After creating a risky behavior scale by adding each variable (where “1” indicates existence of the variable and “0” indicates that it is not displayed) and a scale from 0-6 for the number of friends (where “0” = not listed, “1” = 1-499 friends, “2”= 500-999 friends, etc.), a bivariate correlation was run. There was not a statistically significant relationship between the number of Facebook friends and the number of risky behaviors displayed.

RQ11: *Is the number of friends related to the amount of self-esteem and openness displayed by adolescent girls on Facebook?*

A scale ranging from 0-6 was created for the number of friends (where “0” = not listed, “1” = 1-499 friends, “2”= 500-999 friends, etc.), and two bivariate correlations were run with self-esteem and openness. Both relationships were found to be significant. A positive relationship between the number of friends and the amount of self-esteem was found at the $p < .05$ significance level ($r = .039$, $n = 400$), indicating that girls with more

Facebook friends may actually have lower self-esteem (and more negative status updates) than those with fewer friends. A positive relationship was also found at the $p < .01$ level between the number of Facebook friends and the degree of openness displayed. This correlation is weak overall ($r = .132$, $n = 400$), but indicates that girls with more Facebook friends are also more likely to post details, information and emotion on their Facebook pages.

DISCUSSION

While previous research indicates that the amount of personal information listed is not as much of a problem as the “high-risk behaviors” engaged in or displayed online (Baumgartner, Valkenburg & Peter, 2010; Mitchell, Finkelhor & Wolak, 2007; Wolak et al. 2008), it is interesting to note that an overwhelming majority of girls in this study did have some amount of information and/or photos publicly available. On the one hand, as all of them had limited profiles (thanks to their privacy settings or Facebook’s privacy policy for minors), it suggests that teens may be somewhat aware of their online presence. The warnings of parents and the media about privacy controls have not fallen on deaf ears, and all the girls coded had protected at least some part of their Facebook pages from the public. On the other hand, nearly all of the girls still offered various amounts of information and pictures of themselves to anyone who was interested. It is important to also note that a few girls indicated they had multiple Facebook pages – one “family-safe” account under their real name, and then another one that they used more heavily under a pseudonym that their parents did not know about.

There were girls in the sample who displayed a lot of information, and girls who listed very little. Yet the question to keep in mind is simply: How much is needed? A trafficker may be able to learn exactly what he wants about a girl with very basic information or photos. More information is always helpful, as he may be able to tailor his interactions even more to her interests and personality, but not necessarily required.

[The traffickers] are very aware of what they’re looking for. They’re looking for specific products. A lot of times men want young females who are

underdeveloped. Age and height are important, and in the online auction, they want girls who tend to be feisty because the client wants the fight. They're taking orders just like you would order a car (D. Yeager, personal communication, March 11, 2013).

Therefore, it may be important that the girl's current city, school and graduation year were the most common pieces of personal information listed. This immediately indicates where she lives (and her exact location during the school day) along with her age, by virtue of displaying her graduation year. Most had at least one photo of themselves, and often many more, that were publicly available. Again, it is possible that just one photo is enough to tell if a potential victim has the right look, perhaps especially if that photo is provocative.

It is not surprising that more than 75% of girls displayed some sort of provocative behavior, nor is it surprising that what was most common was sexual photos and sexual comments on those photos. To adolescent girls, the photos are commonplace (and may not be considered provocative) and the language is used every day with friends and is often considered complimentary – guys and girls commenting on the girl's "hotness" and "booty", and affectionately (and not-so-affectionately) calling each other "bitch". However, sometimes the comments got a lot more explicit. One commenter, for example, quoted rapper Lil Boosie, describing a few things he wanted to do to the girl. And yet, girls often caption their photos or post quotes that display a longing for sweet romance and attention.

This is the multi-faceted and confusing world that teenage girls are facing today. Most want a real, loving relationship – and are open about saying so – but they perceive

that they are expected to be aggressive and show off their bodies. Many girls both look for and enjoy that attention. While those stages may be a normal part of growing up, what is not appropriate is the ability to splash all actions, feelings, and interactions online. Unfortunately, a girl's search for that secure relationship and attention, as well as her desire to show off and be found desirable, is easily exploited online.

It is interesting to note that what this research found is when a family member stepped in to post a comment telling a girl that her picture was inappropriate, it was typically not the parents but an aunt, sibling or cousin who did so. Perhaps this is because the photos parents deemed inappropriate had actually been taken down, or perhaps it indicates that parents are simply not paying attention to their teen's profile, even if they are friends on Facebook.

For teenagers, Facebook and other social networks may also encourage provocative and risky behaviors. For example, one girl in this study posted that if 100 people "liked" her status, she would post a completely nude photo of herself. Some 200 people "liked" it, and she did so. She later announced that the photo had not actually been of her, yet that series of actions still shows a willingness to engage in those types of behaviors.

"Traffickers are great psychologists," says Yeager (personal communication, March 11, 2013). "They're realizing that if this girl is already promiscuous, she's primed herself for sexual work and they just have to work her through the process. The trafficker is looking for someone who is already promiscuous, and that can be subtle" (Yeager).

Likewise, someone who engages in other risky behaviors – as nearly half of the girls in this study did – may unintentionally portray herself as an easier target. The most

frequent behavior found was swearing, by the account owner or her friends, which is certainly common among teenagers. However, in a certain context it might convey aggressiveness, trouble with friends, or lack of parental supervision, all of which could be seen as vulnerabilities.

The fact that 14% of girls in this study used Facebook Places to “check in” to certain locations suggests that teens are comfortable telling the world exactly where they are and what they are doing. This could again be exploited, by anyone from a bitter ex to a predator. A trafficker may be able to get a sense of the girl’s favorite hang-out spots, or simply know where to find her if he wanted to track her down offline.

As noted above, Facebook can allow someone to display behaviors that they may not actually be involved in. For example, several girls were coded for “evidence or suggestion of drugs” because they “liked” a fan page for weed, which posted photos and comments about marijuana. This is not concrete proof that they smoke or like marijuana, but at it does at least suggest that they are very open to that behavior.

This research showed a significant relationship between the level of provocative and risky behaviors displayed. And likewise, there was a significant relationship between those two behaviors and the level of self-esteem (measured by negative status updates) and openness on a Facebook page. This suggests that girls who show one of these vulnerabilities tend to actually be vulnerable in several different ways. For example, a girl who is comfortable showing off her body online may also be more comfortable talking negatively about her family and/or sharing intimate details in the public space.

A Facebook status post is conducive to sharing those details and generally being very open. The girls in this study wrote about what they were doing, how much they

hated school, their feelings about a person or issue (such as pining after a crush), and lyrics to songs they identify with, among other things. While much of this information is innocuous, the key element is that it is still information that a trafficker could use against them by providing insight into their lives. Unfortunately, even knowing something as simple as a girl's interests can tell a trafficker how to best manipulate her (Smith, 2009).

However, not all of the information posted is as seemingly innocent. Through simply reading status updates for the girls in this study, it was obvious that one girl's father was in jail and her parents did not have custody of her. Because youth in low-income family situations or foster care have been identified as the most vulnerable to trafficking, that is an especially dangerous piece of information to post publicly. Other girls posted things like, "Home alone for an hour" and even "a bitch wana get fuckd up" [sic].

Likewise, the number of negative status updates also suggests a lower self-esteem and often a cry for attention (Forest & Wood, 2012). While most of the negative comments in this study were complaints about a situation or person, some were directed inward. One girl wrote, "I hate myself, I'm fat and ugly." Whether the girl was truly voicing emotional distress or simply fishing for compliments, that comment still screams that she desperately wants attention.

Although no significant relationship was found between the level of privacy and the level of each behavior displayed, privacy likely plays a factor in the significant relationships found between provocative behaviors, risky behaviors, self-esteem and openness. It makes sense that a girl whose page is public enough to see sexual comments

from her friends, for example, would also be public enough to see her photos (which could be provocative) and status updates on her Facebook wall.

It is interesting that no significant relationships were found between the number of Facebook friends and the number of provocative or risky behaviors displayed. Further research should be conducted to see if this is due to the small sample size or if a high number of friends and contacts actually is not as risky as past studies suggest (see Baumgartner et al., 2010; Mitchell et al. 2007; Wolak et al. 2008).

However, there was a relationship between low self-esteem and number of friends, indicating that the girls in this study with more friends may actually have less self-esteem. Because self-esteem was measured by counting negative status updates, this could be related to the significant relationship between the number of friends and the degree of openness and disclosure on a Facebook page. Both relationships could simply be indicators of someone who is very active on Facebook, thus having more friends, posting frequently, and including lots of information and emotions (including negative) in their posts.

Implications

Past research has shown that the way a girl presents herself online can be associated with online sexual advances and even offline victimization (Angwin & Steinburg, 2006; Noll et al., 2009; Dowdell et al., 2011; Mitchel et al., 2001). Facebook is often the central and most comprehensive online profile of a teenager, and therefore may be one of the first places turned to for information about a teen.

Although it is hard to gauge how often predators, such as traffickers, use Facebook to recruit their next victim, the fact is that it does happen. This study sought to identify the specific vulnerabilities targeted by traffickers and how those behaviors might translate to social media such as Facebook.

While the research in no way concludes that teens must simply close their Facebook accounts, it does suggest that moderate privacy controls are not enough protection. While Facebook regularly changes its privacy controls and settings, which may be confusing, it is important for parents and teens to continually identify the tightest settings. This will not change the presence of risky behaviors, but it will at least shrink the audience.

However, a privatized account is futile if teens regularly accept “friend requests” from strangers, allowing access to their Facebook page. Unfortunately, this is a common practice (Lenhart & Madden, 2007; Livingstone, 2008).

“It’s amazing how many people will just friend you – it’s problematic,” says Detective Sergeant Brad Brown, who has sent friend requests to teens from fake accounts to estimate the extent of the problem in his area. He has also used social media and chat rooms himself to pose as a teen girl and lure predators, and notes, “If a predator wanted to locate a certain individual, it really wouldn’t be all that difficult with as much information as is being posted online” (personal communication, December 5, 2012).

While parents should be aware of how their teen is using Facebook and behaving online, it is important that they realize that there are many ways of hiding online activities – from creating separate, fake accounts to simply blocking specific photos and status updates from the parent’s view.

One of the most important ways to protect teens from unwanted solicitations is simple awareness. Teaching teens the way their information may be used against them, even in a seemingly protected environment such as Facebook, may prompt consideration about what they post online and spark discussion among their peers.

Likewise, parents need to be aware that predators are on social media sites and what they may be looking for. This will help them to foster those conversations and know the content to look out for on their own teen's Facebook page.

Finally, this research has implications for anti-trafficking organizations as they develop curriculum and teach about sex trafficking prevention to youth across the country. Explaining the ways that traffickers and predators have used social media such as Facebook to target victims and foster relationships will be important, especially in conjunction with this research, which identifies some of the high-risk behaviors.

Further Research

Future studies on this topic should evaluate trends and significance based on a larger and more-inclusive sample size. Due to the time constraints of this thesis, 400 Facebook profiles were considered appropriate to provide statistically significant results and leave sufficient time for analysis and discussion. However, it is likely that some of the behaviors that were insignificant in this study may become significant with a larger sample size. Likewise, it would be helpful to compare this research to the same study done with girls across the United States, to see if there are any trends based on location.

While this study focused only on content that was immediately and publicly available, further research could be conducted with the same codesheet but with full access to the girls' pages. Because past studies indicate that teens frequently accept friend requests from strangers, it would make sense for a predator to friend them with a fake account in order to access their full profile and information. Such research would also paint a more complete picture of how teens use Facebook, as it would be able to also look at their interactions with friends (most of which were privatized for this study) and see if new relationships or significance developed with content that was typically privatized in this study.

This could be taken a step further by obtaining access to known predators' Facebook pages and analyzing similarities between targeted girls and their communication with each girl. This research would be the first to study how predators communicate and would also contribute greatly to prevention and protection efforts as well as academia.

Finally, similar studies could be conducted on a different social media platform, such as Tumblr, Twitter, or Instagram, to compare and contrast the types of risky behaviors and privacy options displayed on each. Because social media is continually evolving, it is important that research on teens and social media behaviors is also current and tailored to the largest platforms.

CONCLUSION

The major findings of this study indicate that a majority of adolescent girls display provocative behavior and openness on their Facebook pages, almost half exhibit other risky behaviors and 25% displayed low self-esteem. The significant relationships between each of the three variables indicate that girls demonstrating one online vulnerability also tend to be vulnerable in several other ways. In the world of domestic minor sex trafficking, pimps will target the girls who seem the most available and most vulnerable. But in an online world with few rules and many ways to experiment with identity, girls may unintentionally be displaying many of these vulnerabilities and putting themselves at risk. As pimps turn to Facebook or other social media sites to research, identify and recruit victims, it is important for teens and their parents to understand the information pimps may be looking for and be proactive with the content they share and their online privacy.

Appendix A

Codebook

Directions: Sign into research account. Email and password will be provided. Only the research account is available to view. Type the subject's name into the search bar. Upon pulling up the page, look to see what kind of content is immediately available. Scroll to bottom of the "about/info" section, if there is one, to see if any wall postings are available. Select "Show older stories." At the top, there is a floating navigation bar. Select "2012" and "Show all" instead of the default "highlights", if page permits.

For photos, go to top of the page and click "photos" to see what is available. Click "albums" to see if there are multiple photo albums available.

1. Name (type their ID)

2. Privacy: (type the one appropriate number)

- 1 = Profile set to private: Name, gender/school (sometimes), profile and cover photo only; no other photos or wall available (Wall including only posts with apps or changing profile/cover photo counts as "no wall")
- 2 = Limited Info page public: five or less categories (example: location, school, job, favorites, family, interests)
- 3 = Full information page/more than five categories public (for example, work/education, contact information, "About Me," relationship status, interests, favorite quotes, things they "like")
only public, no photos or wall
- 4 = Only photos public, no information or wall
- 5 = Limited information and limited photos public (only 1-2 albums, or less than 20 tagged pictures, or most pictures not of girl, or several albums but less than 20 pictures publicly available), no wall
- 6 = Full information and limited photo public, no wall
- 7 = Full information and full photos public (multiple albums and/or more than 20 pictures tagged in 2012), no wall
- 8 = Only limited wall (EITHER friends' posts OR status updates), no photos or information
- 9 = Limited information, limited photos and limited wall public (EITHER friends' posts OR status updates)
- 10 = Limited information, limited photos and full wall public (BOTH friends' posts and status updates)
- 11 = Full information, full photos, and limited wall public
- 12 = Limited information, full photos and limited wall
- 13 = Full information, limited photos, limited wall
- 14 = Full profile (information, photos, wall) set to public
- 15 = No information (school/name only), limited photos, no wall
- 16 = Limited info, full photos, no wall
- 17 = No info, limited photos, full wall

- 18 = Full info, limited photos, full wall
- 19 = No info, limited photos, limited wall

INFORMATION AVAILABLE

3. Name provided is:

- 1= Full name
- 2= First name only (E.g., Megan, Megan Grace, Megan D.)
- 3 = Pseudonym: (e.g., Polly Parrot, Megan WhoCaresWhatMyLastNameIs)

4. Birthday provided:

- 1 = Birthday with year (May 18, 1995)
- 2 = Birthday without year (May 18)
- 3 = No birthday

5. Relationship status provided:

- 1 = None provided
- 2 = single
- 3 = in a relationship
- 4 = it's complicated
- 5 = in an open relationship
- 6 = in a domestic partnership
- 7 = engaged
- 8 = married
- 9 = separated

6. Work listed:

- 1 = not listed
- 2 = real job listed
- 3 = obviously fake job listed

- 7. School listed: 1=Yes 2=No
- 8. Middle School/High School: 1 = Middle school 2=High school
- 8. Graduation year listed: 1=Yes 2=No
- 9. Current city listed: 1=Yes 2=No
- 10. Hometown listed: 1=Yes 2=No
- 11. Email Address: 1=Yes 2=No
- 12. Phone number: 1=Yes 2=No
- 13. IM/gchat screenname: 1=Yes 2=No
- 14. Address listed: 1=Yes 2=No
- 15. Sexual Orientation ("Interested in"): 1=Yes 2=No
- 16. Website: 1=Yes 2=No
- 17. Number of friends:

PHOTOS: (LOOK AT PHOTOS)

- 18. Level of provocativeness (dominance of body/chest/lips in picture) of profile photo: 1 2 3 4 5
Level 1 = nonsexual object/animal, girl with large group of friends (posing nicely), headshot, or photo w/ no cleavage/midriff/thigh showing and nonsexual pose, athletic shot

Level 2 = Some cleavage/midriff/thigh but can see girl's whole face and not the point of the photo, girl with boy, nonsexual (body not point of photo) cropped photo in thumbnail image, but not cropped when view photo in album

Level 3 = Photos with body contorted to show off chest/hips/legs, photos with heavy/seductive makeup, otherwise normal photos with pouty lips, kiss on the cheek, tongue, middle finger

Level 4 = Photos with face obstructed/cropped to focus specifically on lips/chest/body, photos with significant cleavage/midriff/thigh (focus of picture), sexualized cartoon character, kissing, photos laying on bed, photos in swimsuits

Level 5 = Photos suggesting nudity, nude photos, two people in bed, explicitly sexual poses, making out, photos with major amounts of underwear visible

19. Level of provocativeness of cover photo (by same guidelines): 1 2 3 4 5

20. Is the girl in the profile picture? 1=Yes 2=No

21. Who is in the profile photo?

1= girl alone

2 = girl with friend(s)

3 = girl with boy

4 = not girl

22. Photos with her in swimsuit/underwear: 1=Yes 2=No

23. Any photos where she appears naked: 1=Yes 2=No

24. Any photos in the bedroom: 1=Yes 2=No

25. Any photos kissing: 1=Yes 2=No

26. Any photos sexual in nature: 1=Yes 2=No

27. Total number of photos listed (Go to "albums" and calculate based on number of photos in each album):

RISKY BEHAVIOR (WITHOUT READING "MORE COMMENTS", CODE WHAT IS IMMEDIATELY VISIBLE)

28. Comments or photos of alcohol use: 1=Yes 2=No

29. Comments or photos of tobacco use: 1=Yes 2=No

30. Comments or photos of marijuana use: 1=Yes 2=No

31. Swear words on profile: 1=Yes 2=No

32. Swear words posted by others on profile/photos 1=Yes 2=No

33. Evidence of family dysfunction/ complaining about family: 1=Yes 2=No

34. Evidence of hate/bullying language by them: 1=Yes 2=No

35. Evidence of hate/bullying language by others: 1=Yes 2=No

36. Use of Facebook check-in: 1=Yes 2=No

37. Evidence of porn use: 1=Yes 2=No

SEXUAL LANGUAGE:

38. In "information" section: 1=Yes 2=No

39. On photos: 1=Yes 2=No

40. On wall: 1=Yes 2=No

SELF-ESTEEM:

41. Total number of negative (emotional, complaining) status updates over the last 10 posts:

AFTER CODING: Amount of openness/disclosure:

42. In looking at this girl's page, do you get a sense of who she is, information about her likes, personality, and life? 1 2 3 4 5

Level 1 examples: no personal information

Level 2 examples: limited information section and/or limited wall

Level 3 examples: (at least one): full information, short "about me" section, 1-3 status updates in the last 10 with information about daily life/emotions

Level 4 examples: long, detailed "about me" section OR four or more recent status updates in the last 10 with information about daily life/emotions

Level 5 examples: long, detailed "about me" section AND more than three recent status updates with information.

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ACADEMIC VITA

Megan Dutil
70 Clivedon Lane
Phoenixville, PA 19460
Megan.Dutil@gmail.com

Education

B.A., Advertising/Public Relations, Spring 2013, Penn State University, State College, PA
B.A., Integrative Arts, Spring 2013, Penn State University, State College, PA

Thesis Title: The Use of Facebook by Adolescent Girls and its Implications for the Domestic Sex Trafficking of Minors

Thesis Supervisor: Dr. Marcia DiStaso

Honors and Awards

- Integrative Arts Student Marshal, The College of Arts & Architecture, 2013
- Top Scholar Award, Kappa Tau Alpha, 2012
- President Sparks Award, Penn State University, 2011
- President's Freshman Award, Penn State University, 2010
- Dean's List, Penn State University, 2009-2013

Activities

- Public Relations Student Society of America
- Penn State Ballroom Dance Team
- Schreyer Honors College Career Development Program, Mentor
- The Navigators, Small Group Leader

Professional Experience

- **Schreyer Honors College**
Public Relations Intern
University Park, Pa. | Fall 2011-Spring 2013
- **LevLane Advertising & Public Relations**
Public Relations Intern
Philadelphia, Pa. | Summer 2012
- **The Kimmel Center for the Performing Arts**
Public Relations Intern
Philadelphia, Pa. | Summer 2012

- **Devine & Partners**
Public Relations Intern
Philadelphia, Pa. | Summer 2011
- **Stradley Ronon**
Marketing Intern
Philadelphia, Pa. | Summer 2011
- **Bloom! Magazine & Webzine**
Co-founder, Editor, Writer, Social Media Manager
Phoenixville, Pa. | 2006-2013
- **Secret in the Sand**
Author
Phoenixville, Pa. | Published 2003