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Chapter Nineteen

Problematic Youth Interactions Online: Solicitation, Harassment, and Cyberbullying

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The adoption of the Internet by American youth (Center for the Digital Future, 2008; Madden, 2006) and the recent rise of social media have provided youth with a powerful space for socializing, learning, and engaging in public life (boyd, 2007; Gross, 2004; Ito, Baumer, Bittanti, boyd, Cody, Herr-Stephenson, Horst, Lange, Mahendran, Martinez, Pascoe, Perkel, Robinson, Sims, & Tripp, 2009; Palfrey & Gasser, 2008). Most American youths navigate an online environment from childhood through adolescence, where they explore their identity, interact with peers, and develop relationships through social network sites (SNSs), online chats, massively multiplayer online games (MMOGs), message boards, and blogs. While the majority of parents (59%) say the Internet is a "positive influence" in their children's lives, (Rideout, 2007), there is also growing concern about the risks of online interactions. Parents, teachers, and law enforcement have raised concerns about the dangers posed by new forms of online communication, particularly online predators, social network sites (Cassell & Cramer, 2007; Marwick, 2008), anonymous contact, and "sexting" (multimedia messaging on mobile devices). This chapter summarizes and interprets the character and scope of research on two types of problematic interpersonal communication that are central to these fears: online solicitation and

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cyberbullying (or online harassment). Based on an emerging body of research, conclusions can be drawn on the prevalence of these problematic forms of online communication to young Americans, risk factors, how technologies mediate risks, and areas for future research.

The Role of the Legal System

Laws (local, state, and federal) regulating these communications are constantly shifting in response to new data, media coverage, public demands, and perceptions of lawmakers. It is the authors' contention that social science generally, and communication research specifically, should lead the discussion of the practical and moral questions inherent in risky online interactions. Therefore, we periodically use legal references for context and clarity, but a legalistic analysis is outside of the scope of this document. Beyond the quickly changing nature of laws, are several reasons why solicitation and harassment are particularly difficult to discuss from a legalistic standpoint. The illegal status of these crimes may rest primarily on laws that do not directly address the perceived crime. For instance, in the case of Megan Meier, who committed suicide when an adult neighbor harassed her online, the neighbor was prosecuted on "accessing protected computers without authorization" and one count of conspiracy, not the act of harassment itself (Associated Press, 2008). This ruling was overturned on August 28, 2009 by judge Wu, because it was deemed to criminalize anyone who signed up for an online service using inaccurate or fake information, a common online practice. This confrontation between societal freedoms and individual safety is frequently repeated in debates on the subject. Lack of proximity is also an issue, because parties involved in solicitation and harassment online may reside in different states or countries, and are frequently anonymous to the end-user, making it difficult to discern where laws are being broken. The culture of the Internet does not place an

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emphasis on legal boundaries, as is evident with the current acceptability to youth of illegally downloading videos and movies. Finally, these problematic interactions unfold over time, and may not start online. For instance, some cyberbullying incidents overflow online from the schoolyard and involve student peers or offline friends. Other activities, such as the exchange of erotic pictures or text communiqués, may be lurid and uncomfortable for parents to talk about, yet take place between two willing (albeit underage) parties.

Perpetrator Characteristics

The focus of researchers interested in online harassment and solicitation has historically been on the individuals who initiate these encounters. Offending parties are frequently anonymous, and include both adults and youths. When youths could identify a perpetrator, it was often a similarly-aged individual doing the solicitation (Wolak, Mitchell, & Finkelhor, 2006) and online harassment (Hinduja & Patchin, 2008a; McQuade & Sampat, 2008; Smith, Mahdavi, Carvalho, Fisher, Russell, & Tippett, 2008). There was also often an overlap between cyberbullying offenders and victims (Beran & Li, 2007; Kowalski & Limber, 2007; Ybarra & Mitchell, 2004a), meaning offenders and victims are not mutually exclusive groups. The minority of Internet solicitations that lead to offline sexual encounters took place between adults in their 20s and post-pubescent adolescents, in a model similar to that of statutory rape (Hines & Finkelhor, 2007).

Adults who solicit or commit sexual offenses against teenagers are a widely disparate group with few commonalities in psychology and motivations for offending. Contrary to the media's claim that pedophilia is at the root of most online sexual abuse, sexual attraction is only one of many reasons behind why adults perpetrate these crimes. Other factors include mental

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disorders (depression, poor impulse control), goals (desire for power and to engage in deviant acts), impulse control, and a generally anti-social character (Salter, 2004). Moreover, despite a frequent misuse of the term, adults who solicit or molest *adolescents* are, by definition, not *pedophiles* (American Psychological Association, 2000; World Health Organization, 2007), because "[s]exual practices between an adult and an adolescent and sexual aggression against young majors do not fall within the confines of pedophilia" (Arnaldo, 2001, p. 45).

The overall prevalence of adult and youth offenders in the general population is unknown. These remain extremely difficult populations to research, as they are mostly anonymous, globally distributed, and may not participate in offline crimes. Similar to many crimes, large-scale quantitative data on offenders, outside of data obtained from those in various stages of incarceration or rehabilitation, does not exist. The challenge of collecting meaningful information on these incidents has been called a "tip of the iceberg" problem, where the number of reported offenses might be much lower than the actual number of offenders (Sheldon & Howitt, 2007, p. 43), leading to vastly differing estimations of population size.

Sexual Solicitation and Internet-Initiated Offline Encounters

One of parents' greatest fears concerning online safety is the risk of "online predators" that entice youth to offline encounters. This topic is the center of tremendous public discourse (Marwick, 2008) and was the central theme in the popular TV show, "To Catch a Predator." In 2007, more than half (53%) of adults agreed with the statement that, "online predators are a threat to the children in their households" (Center for the Digital Future, 2008). Parents are particularly concerned that adults will coerce their children into offline sexual encounters, abduct them, or worse.

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The reality is that few online solicitations lead to offline encounters, as many of these contacts are merely harassing or teasing, and physical abductions of children following from online meetings are nearly nonexistent. When online meetings develop into offline sexual encounters, they are most common between pairs of adolescents and between older adolescents and 20-somethings (Wolak et al., 2006; Wolak, Finkelhor, Mitchell, & Ybarra, 2008b). A sizeable minority (roughly 10–16%) of American youths make connections online that lead to in-person meetings, but they are primarily non-sexual and related to friendship (Wolak et al. (2006).

Fear of strangers sexually abusing children pre-dates the Internet (Glassner, 1999). While this "stranger danger" rhetoric is pervasive, it is not effective at keeping kids safe (McBride, 2005), because 95% of offline sexual assault cases reported to authorities are committed by family members or known acquaintances (Snyder & Sickmund, 2006). Dire predictions about the threat of Internet-initiated sex crimes committed by strangers appear to be exaggerated, as the vast majority of sexual abuse of youths still occurs offline between known parties (Finkelhor & Ormrod, 2000; Wolak, Finkelhor, & Mitchell, 2009).

Solicitation

An online sexual solicitation is broadly defined as an online communication where "someone on the Internet tried to get [a minor] to talk about sex when they did not want to," an offender asked a minor to "do something sexual they did not want to," or other sexual overtures coming out of online relationships (Finkelhor, Mitchell, & Wolak, 2000). The first and second Youth and Internet Safety Surveys (YISS) indicated that 13–19% of youths had experienced some form of online sexual solicitation in the past year. Given the anonymity of communication, it is often impossible to objectively assess the age of solicitors. Nonetheless, youths reported that

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they believed that 43% of solicitors were under 18, 30% were between 18 and 25, 9% were over 25, and 18% were completely unknown (Wolak et al., 2006).

The definition of solicitation encompasses a range of sexualized online contact, including taunting emails, lascivious text messages, fake social networking site profiles that use sexual imagery, and the distribution of digital photos. While some solicitations are designed to lead to an offline sexual encounter, very few actually do. Some of this behavior is "flirting" between minors (McQuade & Sampat, 2008, Smith, 2007), while other solicitations are simply meant to be upsetting (Biber, Doverspike, Baznik, Cober, & Ritter, 2002; Finn, 2004; Wolfe & Chiodo, 2008). This umbrella term of "online solicitation" can be considered similar in dimensionality to offline conceptions of sexual harassment, but is confounded by physical and temporal distance offered by new technologies. For instance, Fitzgerald, Gelfand and Drasgow (1995) found support for a three-dimensional model of offline sexual harassment: gender harassment, unwanted sexual attention, and sexual coercion. Barak (2005) applied this model to sexual harassment on the Internet and argued that online disinhibition, openness, venturesome attitudes, and a masculine atmosphere were instrumental in online sexual harassment.

There are relatively few large-scale quantitative studies concerning the prevalence of online sexual solicitation (Fleming & Rickwood, 2004; McQuade & Sampat, 2008) and even fewer national US-based studies (Wolak et al., 2006). The experiences of key stakeholders, such as school counselors and medical personnel, remain poorly understood. For instance, there have only been two studies that collected law enforcement data on Internet-initiated sex crimes against minors, called the National Juvenile Online Victimization (N-JOV) series of studies (Wolak, Finkelhor, & Mitchell, 2004; Wolak et al., 2009). Key points of data collection are as-yet

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untapped, such as nonprofits and rape crisis centers, which would yield data from sources other than incarcerated offenders and youths who experience this contact.

Online sexual solicitations by adults are of great concern because coercive communications are thought to "groom" youth (Berson, 2003) in a manner similar to offline child molesters (Lang & Frenzel, 1988). There are several reasons why online solicitations, although some are designed to entice youth into offline sexual relationships, are quite dissimilar to those of the media-propagated image of the pedophile enticing children to participate in either offline or online sexual encounters: neither online solicitations nor Internet-initiated relationships particularly tend to target pre-pubescent children; when offline sexual encounters occur, they happen multiple times; and significant deception is uncommon (Wolak et al., 2008b). While adults may shave off a few years from their real age, only 5% of offenders claimed to be the same age as the youth victim (Wolak et al., 2004). Wolak et al. (2008b) concluded that, "when deception does occur, it often involves promises of love and romance by offenders whose intentions are primarily sexual" (p. 113).

Online solicitations are not disturbing to a majority of recipients, as most youths (66–75%) who were solicited were not psychologically distressed by this type of contact (Wolak et al., 2006). A minority of all youths surveyed (4%) reported *distressing* sexual solicitations online which made them feel "very upset or afraid" (Wolak et al., 2006, p. 15), or *aggressive* online sexual solicitations (4%), where the offender "asked to meet the youth in person; called them on the telephone; or sent them offline mail, money, or gifts" (Wolak et al., 2006, p. 15). A small number (2%) of youths reported both aggressive and distressing solicitations. The researchers concluded that while some of the solicitations were problematic, "close to half of the

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solicitations were relatively mild events that did not appear to be dangerous or frightening" (Wolak et al., 2006, p. 15). Online solicitations were also concentrated in older adolescents; youths 14–17 years old reported 79% of aggressive incidents and 74% of distressing incidents (Wolak et al., 2006, p. 15).

Offline Connections

Most offline meetings between youths and adults who met on the Internet were not of a sexual nature. Between 9–16% of youths reported Internet-initiated offline meetings in the United States, across various locations, sample sizes, administration dates, and wording of surveys (Berrier, 2007; Berson & Berson, 2005; McQuade & Sampat, 2008; Rosen, Cheever, & Carrier, 2008; Wolak et al., 2006). Studies in Europe, New Zealand, and Singapore show a wider range (8–26%) of Internet-initiated offline encounters (Berson & Berson, 2005; Gennaro & Dutton, 2007; Liau, Khoo, & Ang, 2005; Livingstone & Bober, 2004; Livingstone & Haddon, 2008), likely due to social norms, varying Internet usage habits overseas, and other international differences. Out of these youths, a minority were involved in sexual contact. In the first Youth and Internet Safety Survey (YISS-1), administered in 2000, no instances of Internet-initiated sex were reported. In the second Youth and Internet Safety Survey (YISS-2), administered in 2005, 0.03% (4 in 1,500) of youths reported physical sexual contact with an adult they met online, and all were 17-year-olds engaging in sexual acts with adults. Two youths out of 1,500 (one 15-year-old girl and one 16-year-old girl) surveyed reported an offline sexual assault resulting from online solicitation. In the small number of offline meetings between minors and adults that involved sex, the offense typically followed a model of statutory rape: a post-pubescent minor

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had non-forcible sexual relations with an adult in their 20s (Hines & Finkelhor, 2007; Wolak et al., 2004; Wolak et al., 2008b).

Data from law enforcement similarly describe how the offense is similar to statutory rape, and involved sexually-themed chat over time, often leading to multiple meetings. Most (80%) online sex offenders brought up sex in online communication with youths, meaning that, "the victims knew they were interacting with adults who were interested in them sexually" (Wolak et al., 2004, p. 424.e18) before the first meeting. Most (73%) of Internet-initiated sexual relationships developed between an adult and a minor involved multiple meetings (Wolak et al., 2004), indicating that the minor was aware of the ongoing sexual nature of the relationship. Internet-initiated sexual encounters between an adult and adolescent were also unlikely to be violent (5% of cases) and none involved "stereotypical kidnappings in the sense of youths being taken against their will for a long distance or held for a considerable period of time" (Wolak et al., 2004, p. 424.e17).

This does not diminish the illegal nature of statutory sex crimes, but signals an opportunity to re-orient the messages provided to youth about how these crimes typically unfold. They are certainly not benign relationships, and some are psychologically harmful to youths (Hines & Finkelhor, 2007). At the same time, it is important to recognize the role that teens play in these types of relationships, because, "if some young people are initiating sexual activities with adults they meet on the Internet, we cannot be effective if we assume that all such relationships start with a predatory or criminally inclined adult" (Hines & Finkelhor, 2007, p. 301).

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Victims and Perpetrators

The focus of research has shifted over the last several years, from offenders to characteristics of adolescents who are solicited online (Peter, Valkenburg, & Schouten, 2005; Ybarra & Mitchell, 2004a; Ybarra, Mitchell, Wolak, & Finkelhor, 2006). If online solicitations are relatively common, and offline sexual relationships typically necessitate an awareness of the youth of the nature of the relationship, what risk factors are related to this escalation? Adolescents are most likely to be solicited online, while the solicitation of pre-pubescent children by strangers (including solicitations leading to an offline sexual encounter) is rare (Wolak et al., 2006). Youth victims of online solicitation also tend to be female (Wolak et al., 2006) and experiencing difficulties offline, such as physical or sexual abuse (Mitchell, Wolak, & Finkelhor, 2007a).

Teens who reported online solicitations tended to be of the age that it is developmentally normal to be curious about sex (Ponton & Judice, 2004). Older youths (teenagers) are more likely to be solicited online and also to respond to these solicitations with real-world encounters, confirmed by both arrests for Internet-initiated sex crimes (Wolak et al., 2004) and youths' self-reports in surveys (Berson & Berson, 2005; McQuade & Sampat, 2008; Rosen et al., 2008; Wolak et al., 2006). Nearly all (99%) victims of Internet-initiated sex crime arrests in the N-JOV study were aged 13–17 years old, with 76% being high school aged, 14–17 (Wolak, Ybarra, Mitchell, & Finkelhor, 2007c), and none younger than 12 years old. Far from being naïve with regard to technology, these adolescents are thought to be more at-risk because they "engage in more complex and interactive Internet use. This actually puts them at greater risk than younger, less experienced youths" (Wolak et al., 2008b, p. 114). This is a perspective that is at odds with

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studies and programs that have equate younger age with greater risk due to a lack of understanding of how new technologies work (Fleming, Greentree, Cocotti-Muller, Elias, & Morrison, 2006; Brookshire & Maulhardt, 2005).

A typical scenario for Internet solicitation and Internet-initiated sexual encounters is a Caucasian male soliciting a teenage girl. According to interviewed youths, girls received the majority (70–75%) of online solicitations, and 73% of those solicited reported that the perpetrator was male (Wolak et al., 2006). In arrest records for Internet-initiated sex crimes, 99% of offenders were male and 75% of cases involved female victims (Wolak et al., 2004). In the N-JOV study, records showed that adult offenders who were arrested for Internet-initiated relationships online with minors tended to be male (99%), non-Hispanic white (81%), and communicated with the victim for 1–6 months (48%).

Online Harassment and Cyberbullying

Online harassment or "cyberbullying" is defined as "an overt, intentional act of aggression towards another person online" (Ybarra & Mitchell, 2004a, p. 1308) or a "willful and repeated harm inflicted through the use of computers, cell phones, and other electronic devices" (Hinduja & Patchin, 2008a, p. 5). This contact threatens, embarrasses, or humiliates youths (Lenhart, 2007), and involves private (such as chat or text messaging), semi-public (such as posting a harassing message on an email list), or public communications (such as creating a website devoted to making fun of the victim). The reach of cyberbullying is "magnified" when mediated through the Internet (Lenhart, 2007, p. 5) because the actual location of bullying may be away from the school setting, and is thus more pervasive (Ybarra, Diener-West, & Leaf, 2007a). "Cyberbullying" and "online harassment" have much conceptual similarity, and are

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frequently used interchangeably both within and outside of academic dialogue (Finkelhor, 2008, p. 26).

The problem of online harassment of minors is more widespread than solicitation, with 4–46% of youths reporting being cyberbullied (Agatston, Kowalski, & Limber, 2007; Fight crime sponsored studies: Opinion research corporation, 2006a; Fight crime sponsored studies: Opinion research corporation, 2006b;Finkelhor, Mitchell, & Wolak, 2000; Hinduja & Patchin, 2008a; Kowalski & Limber, 2007; Kowalski, Limber, & Agatston, 2007; McQuade & Sampat, 2008; National Children's Charity, 2005; Patchin & Hinduja, 2006; Smith et al., 2008; Williams & Guerra, 2007; Wolak et al., 2006), depending on how it is defined; date and location of data collection; and the time population under investigation. Despite its prevalence, cyberbullying is not reported to occur at higher overall rates than offline bullying (Lenhart, 2007; Li, 2007; Nansel, Overpeck, Pilla, June, Simons-Morton, & Scheidt, 2001). Cyberbullying also frequently lacks characteristics of "schoolyard bullying" such as aggression, repetition, and an imbalance of power (Wolak, Mitchell, & Finkelhor, 2007a), leading to dispute among researchers about the similarity between online and offline bullying (Burgess-Proctor, Patchin, & Hinduja, 2009; Hinduja & Patchin, 2008a; Wolak et al., 2007a).

Victims

About a third of cyberbullying involved "distressing harassment" (Wolak et al., 2006). Distress stemming from cyberbullying victimization can lead to negative effects similar to offline bullying such as depression, anxiety, and having negative social views of themselves (Hawker & Boulton, 2000). As Patchin and Hinduja describe it, "the negative effects inherent in cyberbullying… are not slight or trivial and have the potential to inflict serious psychological,

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emotional, or social harm" (Patchin & Hinduja, 2006, p. 149). Wolak et al. (2006) found that youths (10–17 year olds) who were bullied may feel upset (30%), afraid (24%), or embarrassed (22%). Similarly, Patchin and Hinduja (2006) found that 54% of victims were negatively affected in some way, such as feeling frustrated, angry, or sad. This is of concern not just because the youths had emotional responses, but also because negative emotions may be improperly resolved by adolescents through self-destructive behaviors, interpersonal violence, and various forms of delinquency (Borg, 1998; Ericson, 2001; Rigby, 2003; Roland, 2002; Seals & Young, 2003). Negative school-based effects of online harassment have been shown to occur, such as lower grades and absenteeism in school (Beran & Li, 2007).

Perpetrators

Online harassers and their victims are frequently both underage (Kowalski & Limber, 2007; Slonje & Smith, 2008; Wolak et al., 2006; Wolak et al., 2007a). Between 11–33% of minors admitted to harassing others online (Kowalski & Limber, 2007; McQuade & Sampat, 2008; National Children's Charity, 2005; Patchin & Hinduja, 2006; Wolak et al., 2006;). Half of the victims reported that cyberbullies were in their same grade (Stys, 2004), and 44% of victims reported that the perpetrator was an offline friend (Wolak et al., 2006).

Offline Connections

Distinguishing between victims and perpetrators can be challenging because some victims of online harassment are also perpetrators. Between 3 and 12% of youths have been found to be both victims and perpetrators of online harassment (Ybarra & Mitchell, 2004a; Beran & Li, 2007; Kowalski & Limber, 2007). These aggressor-victims experience combinations of risks and are, "especially likely to also reveal serious psychosocial challenges, including problem

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behavior, substance use, depressive symptomatology, and low school commitment" (Ybarra & Mitchell, 2004a, p. 1314). The overlap between online perpetrators and victims shares conceptual similarities to offline "bully-victims" (those who are both bullies and the victims of bullying), which are reported to involve between 6–15% of US youth (Haynie, Nansel, Eitel, Crump, Saylor, Yu, 2001; Nansel et al., 2001). Although these studies conceive of the victim-perpetrator overlap as being related to individual psychosocial qualities, victims may also respond to online harassment in a more direct manner. In a recent study, 27% of teenaged girls were found to "cyberbully back" in retaliation for being bullied online (Burgess-Proctor et al., 2009). Those who are engaged in online harassment but are offline victims may see the Internet as a "place to assert dominance over others as compensation for being bullied in person" or "a place where they take on a persona that is more aggressive than their in-person personality" (Ybarra & Mitchell, 2004a).

The connection between online and offline harassment is complex. Online bully and victim populations partly overlap, and sometimes involve entirely unknown harassers. Due to its apparent similarity to schoolyard bullying (which some researchers dispute), the most frequent way used to determine an overlap with offline bullying is whether it was experienced in a school setting, although this is sometimes difficult to determine, giving the range of technologies involved (an email could be sent at home and read in school, for example). By this measure, less than half of online harassment is related to school bullying, either through location (occurring at school) or peers (offender or target is a fellow student) (Beran & Li, 2007; Ybarra et al., 2007a). In other studies, over half of known bullies (or around 25% of the total number of cyberbullies) were identified as being from school (Slonje & Smith, 2008). Other studies demonstrated

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connections between online and offline bully perpetration (Hinduja & Patchin, 2007; Raskauskas & Stoltz, 2007), and online and offline bully victimization (Beran & Li, 2007; Hinduja & Patchin, 2007; Kowalski & Limber, 2007; Slonje & Smith, 2008, p. 152; Ybarra et al., 2007a). Social and academic performance is also hindered by cyberbullying. For example, those bullied outside of school were four times more likely to carry a weapon to school (Nansel, Overpeck, Haynie, Ruan, & Scheidt, 2003), and youths who experience cyberbullying were more likely to report alcohol and drug use, cheating at school, truancy, assaulting others, damaging property, and carrying a weapon (2007).

Connections with Solicitation

There is a small overlap between online harassment and solicitation, both in victims and perpetrators (Ybarra, Espelage, & Mitchell, 2007b), although little research has been performed on the topic. Youth who are "perpetrator-victims" (both perpetrators and victims of Internet harassment and unwanted sexual solicitation) comprise a very small minority of youths, but may be particularly troubled. They reported extremely high responses for offline perpetration of aggression (100%), offline victimization (100%), drug use such as inhalants (78%), and number of delinquent peers (on average, 3.2). This group was also particularly likely to be more aggressive offline, be victimized offline, and have a history of substance abuse.

Risk Factors

An ongoing body of research details demographic, environmental, habitual, and psychosocial risk factors that moderate the likelihood of youths being bullied or solicited online. David Finkelhor proposed a theory of "poly-victimization" that describes how certain youths are victimized in a multitude of ways by different parties and environmental situations, making them

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a vulnerable group for harm online and offline (Finkelhor, 2008). Several nontechnical means to combat solicitation and harassment have been identified, particularly a strong home environment and family life.

Demographics

Certain demographic factors have been correlated with increased risks for these types of harmful communication. Girls tend to be more at risk for being victimized by online solicitation (Wolak et al., 2006) and harassment (Agatston et al., 2007; DeHue, Bolman, & Völlink, 2008; Kowalski & Limber, 2007; Lenhart, 2007; Li, 2004,2006, 2007; Smith et al., 2008). Youths who are questioning their sexuality also face increased risks, as well. In a study where about 25% of cases of Internet solicitation in a nationwide survey were found to involve a male youth and a male adult, "most of the Internet-initiated cases involving boys had elements that made it clear victims were gay or questioning their sexual orientations (e.g., meeting offenders in gay-oriented chatrooms)" (Wolak et al., 2008b, p. 118). While all of the youths involved in these online activities may not identify as lesbian, gay, bisexual, or transgender in adult life, these studies do identify teens that are questioning their sexuality. The Internet may be a useful place to "come out" and try on new identities, but it appears to also be a place where gay, bisexual, or questioning teens are at a greater risk than their peers.

Teenagers and adolescents (aged 13–17 years) are more at-risk than pre-pubescent children (12 years of age or younger) for most threats, such as online solicitation (Beebe, Asche, Harrison, & Quinlan, 2004; Mitchell, Finkelhor, & Wolak, 2001; Mitchell et al., 2007a; Wolak et al., 2004, 2008b; Ybarra et al., 2007b). Online harassment also occurs less frequently among the youngest adolescents (Lenhart, 2007; Ybarra & Mitchell, 2004a) and children (McQuade &

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Sampat, 2008), and peaks around 13–14 years of age (Kowalski & Limber, 2007; Lenhart, 2007; McQuade & Sampat, 2008; Slonje & Smith, 2008; Williams & Guerra, 2007). Race is generally not a significant risk factor in crimes such as cyberbullying and online harassment (Hinduja & Patchin, 2008a; Nansel et al., 2001; Ybarra et al., 2007a).

Online Contact with Strangers

Communicating with anonymous individuals online is a common activity. Online social media are moving away from "walled gardens," and do not enforce age restrictions, making it nearly certain that youth with encounter postings or messages from people they do not know. Between 45% and 79% of US youths were found to chat with strangers (McQuade & Sampat, 2008; Stahl & Fritz, 1999; Wolak, Mitchell, & Finkelhor, 2006), which was also correlated with receiving online solicitations (Beebe et al., 2004; Liau et al., 2005; Mitchell et al., 2001; Ybarra, Mitchell, Finkelhor, & Wolak, 2007c). Even more specifically, there is a correlation between youths who talk with strangers about *sexual topics* and those who are victimized (Wolak, Finkelhor, & Mitchell, 2008a).

At present, this link is merely correlational. In other words, there is no consensus on whether youths are more at-risk because they talk with strangers, or at-risk youths are more likely to talk with strangers. Some youths may be curious about sexual topics (Hines & Finkelhor, 2007, p. 301), particularly online where they can try out identities and new types of behavior. Other adolescents who are also involved in other risky behaviors (such as making rude or nasty comments, using file-sharing software to download images, visiting x-rated web sites, or talking about sex to people online) in addition to chat are more likely to receive *aggressive* solicitations, as well (Ybarra et al., 2007c; Wolak et al., 2008a).

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Sharing of Personal Information

Posting personal or identifying information is often viewed as a risky behavior, although this by itself does not appear to be a significant risk factor. One reason is that posting information is common (or even required) on Internet sites, and "behaviors manifested by large numbers of people fail to predict events that are relatively uncommon" (Wolak et al., 2008b, p. 117). Other risky habits may be better predictors, and more related to why youths are at risk. In other words, the same psychosocial factors that place youths at risk for online solicitation and bullying are more significant risk factors than that of posting personal information online. For instance, "talking with people known only online ('strangers') under some conditions is related to interpersonal victimization, but sharing of personal information is not" (Ybarra et al., 2007c, p. 138). Despite anecdotal reports (Quayle & Taylor, 2001), cyberstalking, a crime where offenders locate victims offline using information found online (Jaishankar, Halder, & Ramdoss, 2008), only appears in youth online solicitation cases after the offender and victim meet offline (Wolak et al., 2009). Researchers consider cyberstalking to be driven by a desire to harass or control others, or as an online extension of offline stalking (Adam, 2002; Ogilvie, 2000; Philips & Morrissey, 2004; Sheridan & Grant, 2007).

Youths frequently post information of all sorts (text, images, video) online through social media such as SNSs. While investigation in this area is quite new, it appears that only a small number of teens are posting the most sensitive contact information such as a phone number, address, or full name (Hinduja & Patchin, 2008c; Lenhart & Madden, 2007; Pierce, 2007b). Jones et al. concluded that, "the inclusion of offline contact information was an anomaly in user profiles" (Jones, Millermaier, Goya-Martinez, & Schuler, 2008). Males were found to more

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frequently post personal information, while females posted images (Ybarra, Alexander, & Mitchell, 2005). More males were also found to have public profiles while females were more likely to have private profiles (Burgess-Proctor et al., 2009).

Passwords are particularly problematic to share, because they allow youths to impersonate others or hijack accounts. Pew Internet research from 2001 found that 22% of teens 12–17 had shared a password with a friend or someone they knew. (Lenhart, Rainie, & Lewis, 2001), and McQuade and Sampat (2008) found that 13% of 4th–6th graders and 15% of 7th–9th graders experienced someone using their password without their permission and a slightly smaller percentage of youths had someone else impersonate them online. This again signals that the "friends" a youth has may indeed be the same people later harassing them or using their accounts for nefarious purposes.

The number of youths revealing personal information increased from 2000 (11%) to 2005 (35%) (Wolak et al., 2006), and still appears to be on the increase (Burgess-Proctor et al., 2009), in spite of efforts by advocacy groups (National Center for Missing and Exploited Children, 2006; Brookshire & Maulhardt, 2005). During this time there was no increase in Internet-instigated abductions or forcible Internet-initiated sexual encounters between adults and youths. Still, during this time of rapid technological change and transition, it remains to be seen how the risk of transmission of personal information interacts with or mediates other risk factors. In YISS-2, researchers concluded that, "it is not clear what kinds of information are particularly problematic, or exactly what the risks are with respect to the different situations in which youths disclose personal information online" (Wolak et al., 2006, p. 50).

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Depression, Physical Abuse, and Substance Abuse

Depression, physical abuse, and substance abuse are all correlated with various risky behaviors that lead to poor choices with respect to online activities. Depressed youths were more likely to report increased unwanted exposure to online pornography (Wolak, Mitchell, & Finkelhor, 2007b), online harassment (Ybarra, 2004; Mitchell, Ybarra, & Finkelhor, 2007b; Ybarra, Leaf, & Diener-West, 2004), and solicitation (Mitchell et al., 2007b). Risk for online harassment was particularly pronounced among depressed male youths, who were 8 times more likely to be victimized than non-depressed male youths (Ybarra, 2004). Suicidal ideation has also been significantly correlated with online harassment victimization among adolescents (Hinduja & Patchin, 2008a). Self-harm, often a physical manifestation of depression, is also correlated with other risky behaviors that increase the likelihood of risk (Mitchell & Ybarra, 2007; Mitchell, Finkelhor, & Wolak, 2005). Depressed youths were also prone to a host of other risk factors, and were more likely to be heavy Internet users and talk with strangers online (Ybarra et al., 2005), making it difficult to untangle where the risk lies. Adolescents who have been sexually or physically abused offline are more likely to be solicited or harassed (Mitchell et al., 2007a; Mitchell et al., 2007b; Wells & Mitchell, 2008). Both youths who harass others (Ybarra & Mitchell, 2004b) and are solicitation victims online (Mitchell et al., 2007b) were more frequent drug users. Youths who were *both* perpetrator-victims of Internet harassment and unwanted online sexual solicitation were the heaviest drug users (Ybarra et al., 2007b). Offline, bullies tend to have used alcohol or other substances (Ybarra & Mitchell, 2007), paralleling the online environment.

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Home Environment

The vast majority of parents (90%) are concerned about their child's online safety (Wolak et al., 2006), and, "a warm and communicative parent-child relationship is the most important nontechnical means that parents can use to deal with the challenges of the sexualized media environment" (Greenfield, 2004, p. 741). Home is where nearly all (91%) of youths reported using the Internet (Wolak et al., 2006), and adolescents who live in a poor home environment are at higher risk for online sexual victimization (Wolak, Mitchell, & Finkelhor, 2003a) and harassment (Ybarra & Mitchell, 2004b). Low parental monitoring was correlated with a host of negative offline consequences, such as increased likelihood of violence over time (Brendgen, Vitaro, Tremblay, & Lavoie, 2001), police contact (Pettit, Laird, Dodge, Bates, & Criss, 2001), and traditional offline bullying (Patterson, 2002; Steinberg & Silk, 2002).

A positive and communicative home environment inoculates youths against a host of dangers. Parents were generally responsible about their children going to real-world meetings resulting from online contact; 73% of parents were aware of real-world meetings and 75% accompanied the minor to the meeting (Wolak et al., 2006). About half of parents discussed related topics (such as online sexualized talk, adult pictures, and harassment) with their children, who were more safety-conscious as a result (Fleming et al., 2006). Similarly, parenting style was related to the techniques used to restrict access of minors to the Internet (Eastin, Greenberg, & Hofschire, 2006), more family rules about the Internet were correlated with less risk of a face-to-face meeting with someone met online (Liau et al., 2005), and a positive parental relationship improved effects from poverty and other socio-economic factors (Barnow, Lucht, & Freyberger, 2001).

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Despite an interest in the topic, parents held inaccurate beliefs about the risks of Internet communication (Livingstone & Bober, 2004; DeHue et al., 2008). Parents under-estimated the amount of information adolescents posted online (Rosen et al., 2008), how frequently their children posted online personals, and corresponded with strangers (Computer Science and Telecommunications Board National Research Council, 2002, p. 165). This under-estimation of incidents may be due to the infrequent reporting of harassment or solicitation incidents (or even general Internet habits) to parents or other adults. Only around a third of youths who were harassed reported the occurrence to a parent or guardian (DeHue et al., 2008; Fight crime sponsored studies: Opinion research corporation, 2006b; National Children's Charity, 2005; Patchin & Hinduja, 2006; Wolak et al., 2006) and even less frequently told another adult such as a teacher. Youths may not report these incidents because they frequently (69%) felt that the incident was "not serious enough" to warrant discussion with an adult (Wolak et al., 2006, p. 26). Lines of communication should remain open between parents and their children, for mutual benefit.

Privacy Settings and Blocking

Youths benefit from an awareness of features that can be used to combat harassing contact. Between a third and half of SNS users employ privacy settings on SNSs. In 2006, Lenhart and Madden (2007) found that 66% of youths 12–17 had limited access to their SNS profiles, while Hinduja and Patchin reported slightly lower rates of setting profiles to private (Hinduja & Patchin, 2008c). Young SNS members also employed blocking features when sexually solicited online. Of the 7–9% of SNS members that were "approached for a sexual liaison," almost all immediately blocked the user (Rosen, 2006).

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Youth have also developed a range of informal practices to deal with unwanted online contact. In a qualitative study, youths who are asked about such encounters draw parallels to spam or peculiar comments from strangers in public offline settings, noting that ignoring such solicitations typically makes them go away (boyd, 2008). There are situations where youths do not perceive the setting of media as private to be necessary. Lange (2007) described the awareness of YouTube users of the difference between being anonymous to a large number of people ("privately public"), or known but viewable by a smaller group ("publicly private"). Similarly Ben-Ze'ev (2003) states, "with complete strangers, the issue of privacy [online] is of little concern since we are in a sense anonymous" (p. 454). Of course, if a person's identity is disclosed, it can lead to a violation of a participant's expectancies. The revealing of personal information online and how youth view privacy is a controversial and evolving topic.

Mediating Technologies

Technologies that mediate online communication, such as chat rooms, message boards, and social network sites, attract different groups of youths and provide varying features to communicate. Youths tend to congregate online where their peers are, so many troubling interactions take place through popular technologies. Youths are also quite adept at using online technologies to suit their own goals. In some types of environments, it is more normative for youths to interact with people they don't know, such as on a message board where aliases are employed. At-risk youths are more attracted to some environments, elevating their levels of risk, as is demonstrated when depressed teens more heavily use online chat.

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Chatrooms and Instant Messaging

Chatrooms and Instant Messaging (IM) have been the most prevalent media in online solicitation (Wolak et al., 2006) and harassment (Wolak et al., 2006; Kowalski & Limber, 2007; Fight crime sponsored studies: Opinion research corporation, 2006a; Fight crime sponsored studies: Opinion research corporation, 2006b) of minors. Chat and IM played a role in 77–86% of solicitation attempts and Internet-instigated relationships leading to offline sexual encounters (Wolak et al., 2004). This and other literature suggests the possibility that, "the nature of chat rooms and the kinds of interactions that occur in them create additional risk" (Wolak et al., 2007c, p. 329). Authorities have used these technologies extensively and effectively for "sting" arrests (Wolak, Mitchell, & Finkelhor, 2003b).

Several explanations exist for why chat and instant messaging are particularly prevalent in harassment and solicitation. Synchronous media may be particularly effective to get immediate feedback on if a youth is interested in a sexual topic, or irritate a target through a constant stream of messages. In addition to being popular, these technologies are used by youths for locating partners (Šmahel & Subrahmanyam, 2007) and general socialization (Leung, 2001). Youths who have a poor home environment or engage in other risky behaviors are more likely to use online chat frequently (Beebe et al., 2004), and chatroom use is correlated with increased depression (Ybarra et al., 2005), suggesting chat could be a particularly attractive mode of communication for youths who are not getting the emotional support they need.

Blogging

A sizeable minority of youths (28%) has created a blog (Lenhart, Madden, Macgill, & Smith, 2007b), but despite some suggestions that it is potentially dangerous (Huffaker, 2006),

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youth bloggers do not appear to have a higher level of interaction with strangers online nor are they more likely to be sexually solicited (Mitchell, Wolak, & Finkelhor, 2008). That said, they have been found to be more likely to experience online harassment (Mitchell et al., 2008).

Social Network Sites

Social network sites, or SNSs (boyd & Ellison, 2007), such as MySpace and Facebook, are among the most popular and controversial types of social media. As of 2007, over half of youths have used them to create profiles (Lenhart, Madden, Macgill, & Smith, 2007a) and develop new friends (Smith, 2007). Young people are frequently members of SNSs (Lipsman, 2007), and use them to communicate and maintain social bonds (Granovetter, 1973, 1983), and as a base for online communities (Rheingold, 2001; Smith, 1999). Despite a strong public interest, research is inconclusive on the extent to which these sites present a risk.

Parents are justifiably concerned about youth interactions in these online spaces, as they know little about them, and what they do hear through the media tends to be negative. In 2007, 85% of adults were uncomfortable with their children participating in online communities (Center for the Digital Future, 2008) and in 2006, 63% of parents thought there were “quite a few sexual predators” on MySpace (Rosen, 2006). This worry was not carried by the youths who use these sites; 83% of teenagers felt this type of website is generally safe (Rosen, 2006), despite that a sizeable minority (19–22%) of youths reported being upset by harassment or solicitation on these sites (Rosen et al., 2008). Several other researchers have reported correlations between SNSs and either solicitation or harassment. Lenhart (2007) found that, “social network users are also more likely to be cyberbullied” (p. 4), particularly certain types of online harassment, such as spreading of rumors and harassing email (Lenhart, 2007). Girls appear to be more prone to

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receiving unwanted messages on SNSs (Smith, 2007), because harassers and solicitors generally target girls. Studies suggest SNS membership is slightly more female (51–54%) (Hinduja & Patchin, 2008b; Jones et al., 2008; Schrock, 2006; Thelwall, 2008), but this may be due to a minority of males self-identifying as female online.

Although certain SNS members (those who posted a picture and those who flirted online) were more likely to receive online contact from strangers, Smith concluded that, "despite popular concerns about teens and social networking, our analysis suggests that social network sites are not inherently more inviting to scary or uncomfortable contacts than other online activities" (Smith, 2007, p. 2). Similarly, Ybarra and Mitchell (2008) concluded that, "[b]road claims of victimization risk, at least defined as unwanted sexual solicitation or harassment, associated with social networking sites do not seem justified" (p. e350). The popularity of SNSs may be the attraction, because those seeking to victimize youths migrate to where they are; "When a medium becomes used by a huge portion of the population… it inevitably becomes a venue for deviant activity by some, but it is not necessarily a risk promoter" (Wolak et al., 2009, p. 8). Several troubling areas arise on SNSs, such as how, "the greatest exposure of children and adolescents to sex crimes is at the hands of people who are already a part of their families and social networks" (Wolak et al., 2009, p. 8). Much more research is needed in this area to provide a complete picture of how this technology is being adopted and used by youths, particularly in the context of sexualized communication.

Multiplayer Online Games and Environments

Nearly all American youths play games daily (Lenhart, Kahne, Middaugh, Macgill, Evans, & Vitak, 2008), half (47%) play with friends they know offline and 27% with people they

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met online. Contrary to stereotypes, females do play online games, but in lower numbers than males for most genres (Entertainment Software Association, 2008; Griffiths, Davies, & Chappell, 2003; Lenhart et al., 2008; Yee, 2006). The percentage of youth players may vary greatly between games, even within the same genre (Williams, Yee, & Caplan, 2008). The research is split on whether players of games such as MMOGs (Massively Multiplayer Online Games), are more at-risk than other youths for psychosocial factors such as depression, substance abuse, difficulties with self-regulation, trouble at school, and increased aggression (Ducheneaut, Yee, Nickell, & Moore, 2006; Ng & Wiemer-Hastings, 2005; Seay & Kraut, 2007; Williams & Skoric, 2005; Williams et al., 2008).

Online gaming environments frequently have multimedia capabilities and interactive possibilities well beyond web-based social media (such as SNSs). As concerns online communication, many games offer real-time multimedia chat during gameplay through text, voice, or video, and may encounter aggressive behavior (Anderson & Bushman, 2002; Funk, Baldacci, Pasold, & Baumgardner, 2004; Williams & Skoric, 2005). For instance, nearly half of game-playing teens report seeing or hearing “people being hateful, racist, or sexist while playing” at least sometimes, and 63% reported “people being mean and overly aggressive” (Lenhart et al., 2008).

In addition to more familiar modes of communication, 3-dimensional environments offer a new way for harassment to occur: “griefing.” This is defined as when a player, “utilizes aspects of the game structure or physics in unintended ways to cause distress for other players” (Warner & Ratier, 2005, p. 47) and disrupts the gaming experience (Foo & Koivisto, 2004; Lin & Sun, 2005). For instance, players may be virtually confined in a cage, repeatedly killed, or teleported

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against their will. It is unclear if harassment on virtual worlds is inherently more distressing than other online technologies. Gamers may have a greater connection with their avatars, and may even feel that an avatar is physically their own body (Ehrsson, 2007; Lenggenhager, Tadi, Metzinger, & Blanke, 2007), raising the question of if people playing MMOs are more susceptible to psychological harm through griefing.

Multimedia Communications

Multimedia used in online harassment is not yet as widely prevalent as text forms, although this may change with increased adoption of mobile devices. For instance, 6% of youths reported having an embarrassing picture of them posted online without their permission (Lenhart, 2007) and 8% reported being a victim of images transmitted over a cell phone (Raskauskas & Stoltz, 2007). These multimedia communications include images and movies created by victims and then modified to poke fun at them (British Broadcasting Corporation, 2006), "mash-ups" that combine user-generated content with other imagery or videos (Jenkins, 2006), or content unrelated to the victim that is designed to disgust or offend (such as a sexually-themed picture). The role of technologies such as cell phones and webcams, which are being adopted by youths (Rainie, 2005), is not yet known, but multimedia communications can be more distressing (Smith et al., 2008).

Multimedia is also used in coercive online solicitation. Youths have been sent inappropriate images (such as of genitalia or sexual situations), or images were requested from youths. In the N-JOV study, arrested Internet-initiated sex offenders were found to send adult pornography (10%) or child pornography (9%) to victims (Wolak et al., 2004). One in five online child molesters took "sexually suggestive or explicit photographs of victims or convinced

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victims to take such photographs of themselves or friends" (Wolak et al., 2008b, p. 120). In a national survey, 4% of youths who use the Internet reported receiving a request for a sexual picture of themselves (Mitchell, Wolak, & Finkelhor, 2007c) (but only one youth in 1,500 complied), and 7% of students in grades 7–9 in the Rochester, New York, area received an online request for a nude picture (McQuade & Sampat, 2008).

Sexualized images and videos of youths, regardless of how they are created, constitute a troubling source of illegal, underage pornographic material for adults (if released on the Internet), and serve as fodder for future harassment or bullying (if stored on devices or computers). Despite low rates of compliance among youths, this is a serious issue, as, "[even] if only a small percentage cooperate, considering such requests flattering, glamorous, adventuresome, or testament of their love and devotion, this could be a major contribution to the production of illegal material" (Mitchell et al., 2007c, p. 201). Once these videos and images are uploaded, it is nearly impossible to keep them from being traded, downloaded, and viewed by third parties. Taylor and Quayle describe the way this content can never be deleted as "a permanent record of crime, and serves to perpetuate the images and memory of that abuse" (Taylor & Quayle, 2003, p. 24).

Future Research

In addition to the topics discussed here, some areas of youth safety are critically under-researched, particularly (1) conceptual clarity, (2) minor-minor solicitation and sexual relations, (3) the role of digital image and video capture devices, and (4) the impact of mobile technologies. New methodologies and standardized measures that can be compared across populations and studies are also needed to illuminate these under-researched topics. Finally,

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because these risks to youth are rapidly developing, there is a dire need for ongoing large-scale national surveys to synchronously track and quickly report these complex dynamics as they unfold.

Conceptual Clarity

Online solicitation and cyberbullying are investigated from a variety of disciplines, including sociology, child development, computer science, and communication. This inclusive approach led to vital findings, but not unified terminology. For instance, the phrase "online solicitation" on the surface level appears to specifically describe coercive communication, but its definition includes much communication that falls under sexual harassment, such as gender harassment and unwanted sexual attention. When statistics, such as the finding that one in five youths has been solicited online (Wolak et al., 2006), are quoted in the lay press, it leads to misunderstandings by the public, who may incorrectly assume that coercion is the motive and the perpetrators are sexually attracted to children. The time frame under investigation also varies between studies, and is a factor in the lack of consensus on how frequently these crimes occur. For instance, the widely varying statistics on the prevalence of cyberbullying come from surveys that ask youths about their experiences in the last few months, year, or lifetime. A theoretically rigorous multi-dimensional construct for cyberbullying and online solicitation, one that describes the areas of overlap as well as functional and time-based differences, would lead to more fruitful research and less confusion.

Minor-Minor Solicitation and Sexual Relations

Most research to date on solicitation has focused on solicitation by an adult, frequently a "stranger," who coerces a minor into a sexual relationship. Yet, research on online harassment

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and solicitation has revealed that this mode of operation isn't the norm, and the online coercion of children by adults into offline sexual relationships is scarce. More importantly, this focus on adult-minor coercive communication draws attention away from more prevalent and complex forms of online solicitation and harassment. It remains unclear how sexualized Internet solicitations (coercive and otherwise) are integrated with offline relationships among similar-aged youths, and where harmful encounters occur. Some of this contact is consensual, such as "sexting" or the writing of erotic emails between willing minors. However, there is the possibility that Internet-mediated communication is playing a role in undesirable offline outcomes such as rape, or that other offline crimes integrate new technologies in unforeseen ways. We need to consider a more holistic perspective when analyzing how sexual relationships and friendships are created, maintained, and terminated, and the emotional implications these have on teens. Finally, relying on the term "stranger" is problematic, because two people are not necessarily strangers after interacting together online, and the creation of online friendships (primarily non-sexual) is common. The concept may not be useful when considering online harm to youths.

Multimedia Communication

As more children and teenagers engage in the production or reception of amateur content in the process of harassment or solicitation, questions emerge about the content they are producing and integrating into daily life. Multimedia-capable devices are gaining in popularity (Center for the Digital Future, 2008; Hinduja & Patchin, 2008a), which offer multimedia recording through an "always on" connection direct to the Internet. Images and movies may be particularly distressing to victims of online harassment (Smith et al., 2008) or increase the initial

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attraction (Walther, Slovacek, & Tidwell, 2001). A similar charge can be leveled against research on multimedia harassment as was made against multimedia computer-mediated communication (CMC) in 2000 (Soukup, 2000): more research is required to overcome the "text-only bias" of online harassment. Harassment and solicitations are increasingly complex and multi-modal, and offenders may integrate, process, and post photographs and videos in ways we don't yet understand. Special care should be taken to assess the impact of and track this new form of cyberbullying over the next several years.

The rates of the use of multimedia for consensual sexual relations among minors is currently poorly understood, but seems likely, given the use of images to develop relationships online (Walther et al., 2001), the wide variety of amateur content created and distributed online both privately and publicly (Jacobs, 2007), and the presence of sexualized pictures on SNSs such as MySpace (Pierce, 2007a). These movies and images may be created during consensual sexual relationships between similar-aged adolescents, for instance, during flirting, which is common (Lenhart, 2007; Schiano, Chen, Ginsberg, Gretarsdottir, Huddleston, & Isaacs, 2002) or as an outlet for sexual thoughts and development (Atwood, 2006; Subrahmanyam & Greenfield, 2008). In one of the first surveys to include questions on the topic, 3% of 7th–9th graders asked for "naked pictures from another Internet user" (McQuade & Sampat, 2008). Finally, as previously discussed, video game and virtual world experiences may offer immersive new modes of harassment, such as griefing.

Intersection of Different Mobile and Internet-Based Technologies

The majority (77%) of Internet-initiated sex crimes against youths used multiple modes of communication (Wolak et al., 2004), but little is understood about the interplay between them.

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Most research has focused on the role of the Internet, but mobile phones are increasingly playing a role in sexual solicitation and harassment. It is already known that mobile phone use is a risk factor for receiving aggressive sexual solicitations online (Mitchell et al., 2007a) and online harassment (Hinduja & Patchin, 2008a). Mobile communication also provides a pervasive personal space where youths may be contacted at any time. How mobile devices are used in the United States for harassment and solicitation requires further examination over the next several years as these increasingly powerful devices are used by younger demographics.

The most recent online solicitation-related term the media have adopted is "sexting," or the sending of sexual multimedia content between minors on mobile devices or cell phones. According to LexisNexis, the term was not used in an indexed article in the United States until May 2008, and 75% of the articles (on a search performed March 21, 2009) were published in the first three months of 2009. Studies on the creation or transmission of sexual media on mobile devices are few, and statistics on how many youths receive solicitations or respond to them vary widely. A 2008 study conducted in the United Kingdom by TRU found that 20% of teens aged 13–19 sent nude or semi-nude photos or videos (The National Campaign, 2008). In this study, the majority of "sexting" communications appear to be from one individual to another; 71% of teenaged girls and 67% of teenaged males sent them to a significant other (The National Campaign, 2008).

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