Cyber safety for adolescent girls: bullying, harassment, sexting, pornography, and solicitation

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Structured Abstract

Purpose of review: to examine cyber safety for adolescent girls, specifically issues around the definition, measurement, prevalence and impact of cyber bullying, harassment, sexting, pornography, and solicitation.

Recent findings: despite some continuing disagreements about definition, especially around cyberbullying and cyber harassment, and about measurement, it is clear that a significant minority of adolescents have potentially or actually harmful experiences on the internet. There are important gender differences, and those exploited by pornography are mainly female. On some measures these dangers have increased in recent years, although the extent can be exaggerated. The nature of internet grooming appears to be changing. Negative effects are well documented in a range of domains, although more longitudinal studies are needed. Individual coping strategies, family and school based support, and legal actions, all have a role to play in minimizing these dangers.

Summary: cyber safety is an important issue. More research and action is needed, and interventions need to be evaluated for their effectiveness.

Keywords: cyber bullying sexting pornography solicitation

Introduction

The use of mobile phones and the internet has grown at a tremendous rate in this century, transforming the lives of young people. The 2013 Ofcom report [1] showed that in the UK, such use approaches saturation by adolescence: 82% of 12-15 year olds have a mobile phone (62% have as smart phone) and 94% have internet access at home. Similarly in the USA 74% of 12-17 year olds have mobile access and 95% internet access [2]. This has enriched the lives of adolescents, as it has of adults. However there is a darker side, with risks including cyberbullying and harassment, sexting, pornography and solicitation. The EU Kids Online network classified online risks as aggressive, sexual, value-related (e.g. visiting extremist sites) or commercial [3,4*]. Here, we review risks, especially for adolescent girls, in the aggressive and sexual domains, where research has been most focussed.

Cyber-bullying and harassment

There are many types of 'electronic' or cyber-aggression, including flaming, online harassment, cyberstalking, denigration (put-downs), masquerade, outing, exclusion, putting up false profiles and distributing personal material against someone's wishes. Recent research collections are available in books [5,6,7] and journals reviews [8*,9,10**].

Definition and measurement

Many researchers have used the term cyberbullying, incorporating criteria of repetition and imbalance of power [11]; but often studies use this term loosely [12]; other researchers argue for using a more general construct of cyber aggression or harassment [13]. A cross-national study [14*,15] found that 11-17 year olds themselves gave most weight to imbalance of power in judging whether a scenario was a case of cyberbullying (except in France, where the term *cyberviolence* is used), followed by intentionality, and anonymity of the perpetrator as a substitute for imbalance of power; repetition, and also

the public/private nature of the context, were less important. Measurement procedures need to be clearly specified; a systematic review of 43 cyberbullying instruments found that few reported their reliability or validity [16*]. New instruments include a Cyberbullying Scale [17*].

Prevalence

Estimates of the prevalence of cyberbullying vary greatly depending on measurement and sample issues, but occasional or one-off occurrences may be reported by 20% or more of young people; serious, recent or repeated incidents by around 5% [4*,6]. Low rates (2% to 5%) were reported in a large Swedish sample of 15-16 year olds [18], but high rates (35%-57%) in a study in mainland China [19]. Prevalence does appear to peak in mid-adolescence. Reports on gender differences continue to be very variable; some studies find boys more involved [19], others that girls are more often cybervictims [18]; girls are especially interested in social networking sites, where much cyberbullying now occurs [20].

Risk factors and impact

Cross-sectional studies continue to predominate in research on correlates or likely effects of cyberbullying. A Swedish study found that cyber victims and bully/victims especially, but also perpetrators, reported lower subjective health [18]; and a U.S. study found similar associations for physical health, self-esteem, depression, academic grades, and suicidal ideation [21]. Another U.S. study [22] found that being a victim of cyberbullying was associated with suicidal thoughts, but with a stronger association between traditional victimization and suicide attempts for females; but a stronger link between cyberbullying of others and suicide attempts, for males. Depression emerged as a significant mediating factor between victimization and suicide attempts, especially for females. In a longitudinal study in Spain, cyber victimization predicted increased depression in both boys and girls, and also problematic internet use; higher depressive symptoms and more

substance use predicted later cyber victimization, suggesting a vicious cycle over time [23*]. A longitudinal study in the U.S. suggests that adolescents may use electronic aggression to enhance peer status; popularity was associated with increases in electronic aggression over time, and electronic aggression in turn increased popularity in girls (but not in boys) [24*].

Intervention

Regarding coping strategies, a study in China found similar findings to western studies: ignoring was a common response, as well as talking to someone about it, but talking to teachers was very rare [19]. A Delphi study obtained expert opinions on ineffective and improved coping strategies for cyberbullying, some new to the literature [25]. Internet safety education programmes need to be based on research findings, tailored to developmental needs, and evaluated [*26]. Other procedures including traditional anti-bullying interventions can be helpful [*4].

Sexting

A systematic literature review of 31 articles on sexting concluded that it was a prevalent behaviour with greatly varying definitions and measurements [27**].

Definition and nature

Sexting can be defined as 'the sending, receiving and forwarding of sexually explicit messages, images or photos to others through electronic means, primarily between cellular phones' [27**]. Although sexting has received some press attention, until recently there has been little empirical research. The majority of sexual images and texts pass between consenting adults and adolescents without harm. However, if sexually explicit images are disseminated without consent, if those involved are underage, and if the images are used to cyberbully, there can be potentially serious outcomes [28]. Qualitative research [29*,30*] has identified young women as particularly at risk, as they often feel pressurised or coerced to send sexual images or 'sexts'.

Prevalence

In Europe, the EU Kids Online project found that 15% of 11-16 year olds had received peer to peer sexual messages or images [3,31]. Of those, 3% said they had sent or posted such images. In the UK, 12% of 11-16 year olds internet users had received sexual messages, with 4% sending sexts [31]. A follow-up from 2010 to 2013 in five EU countries, including the UK, found an increase in young people reporting seeing sexually explicit images, in particular adolescent girls [32]. The Child Online and Exploitation Protection Centre (CEOP) identified a marked increase in self generated indecent images (SGII) being uploaded to the internet [33]. In the U.S. the prevalence of adolescent sexting varies widely, from 9.6% [34] to 28% [35], due to inconsistencies in definition and measurement. One study found female adolescents more likely to be involved in sexting [34].

Risk factors and impact

Some predictors of involvement in sexting have been identified [36*]. Those at risk of seeing or receiving sexts are older adolescents, who score higher on psychological difficulties, sensation seeking, and risky online and offline behaviour. Predictors of risk of harm from receiving sexts are being younger, female, and scoring higher on psychological difficulties and lower on sensation seeking. Other predictors of involvement in sexting are being sexually active [35,37,38], involvement in alcohol and drug use [35,39], having unprotected sex [40,41], engaging in web-based chatting with strangers and viewing adult pornography [41], and the personality variables of neuroticism and low agreeableness [42], whilst in females anxious attachment has been associated with consenting to unwanted involvement [43]. There is less research specifically on the impact of sexting on victims, separate from the broader topic of cyberbullying.

Intervention

Interventions to promote cyber safety regarding sexting include using legislation, identifying those most at risk to target support and educational initiatives. A comprehensive strategy using legislation to ensure that risks of cyberbullying and sexting are dealt with in a way that empowers young people has been proposed [44]. It has been argued that "predictors (of involvement in sexting) could be used to more precisely target those who experience harm in order to reduce harm overall from internet use" [36]. In the UK, CEOP have a 'ClickCEOP' button linked to 1,700 different websites for children to report abuse. The button links to a team of specialist NSPCC child protection advisors. CEOP Education has produced films; resources and guidelines for schools about sexting [45**]. An evaluation of their short film, Exposed, found it was rated highly by younger students, girls and those who had been involved in sexting incidents [46].

Pornography

Children and young people experience pornography in three main ways: access, exposure and exploitation. There are clear gender differences: the vast majority of those exposed to and accessing pornography are male; those exploited by pornography, particularly child pornography, are mostly female.

Prevalence and nature

In the UK, a review by the Office of the Children's Commissioner (OCC) on pornography was titled "Basically... porn is everywhere" [47**]. It found that prevalence rates of access and exposure to pornography varied widely by study; from 15% to 57% of children and adolescents being exposed to sexual or pornographic images both on- or offline within the previous year and from 43% to 99% for exposure over the lifetime [47**]. The EU Kids online research found that exposure to pornography mostly occurs on video-sharing websites (YouTube), social networking sites and gaming platforms [48*]. Among 9 to 16 year olds, the largest percentage (22%) identified pornographic content as their foremost online concern [48*].

Gender differences

Accessing pornography appears to be an almost exclusively male activity. In a survey of Swiss adolescents, online pornography viewing was almost exclusively reported by male adolescents [49*]. These gender differences were also evident in the OCC report [47**], with young men and boys more likely to be exposed to, access, seek and use pornography than young women and girls; boys and young men also had a more positive attitude to pornography. Although research varies on the impact of viewing pornography [47**], a retrospective, longitudinal study of sex offenders found that exposure to pornography in adolescence was a significant predictor of elevated violence, particularly the extent of victim humiliation [50]. Most victims of child pornography are female. A CEOP threat assessment [45**] identified the proliferation and dissemination of indecent images of children (IIOC) as the foremost threat to the safety of children. An analysis of IIOC reports received by CEOP found an overall increase in the number of female children in images; from January 2010 to December 2012 there was a 70% increase in female victims under 10 years and a 25% increase in those over 10 years [45**].

Pornography and sexting

When sexually explicit images are sent by minors, sexting can also become legally classified as child pornography [28]. As the majority of sexually explicit images or sexts are sent by girls [29*,30], young women are particularly at risk of victimisation and exploitation. Viewing adult pornography has been identified as a predictor of sexting [41].

Intervention

Cyber safety to prevent sexually explicit images being exploited by third parties as pornography, as for sexting, involves both legislation and education. As the predominant victims of child pornography, girls and young women need the most cyber safety education, protection and support. For perpetrators of child pornography, there is a range of child protection legislation. An increase in arrests and prosecutions reflects the accessibility and

increasing prevalence of child pornography online (45**,51). As far as underage access to pornography is concerned, a UK industry regulator, Atvod, has called for the law to be changed to require pornography sites to carry out age checks before granting access [52].

Solicitation

The concept of grooming has been drawn from the early sex offender literature and refers to the process by which a child is targeted and prepared or socialized for sexual abuse [53].

Nature

Grooming behaviour online can include psychological abuse, when this involves entrapment, emotional blackmail over apparent complicity and manipulating the child/young person's trust. Threats to distribute and make public sexually explicit images of the child or images of the abuse can be used to terrorise and threaten [54].

Process of grooming

Earlier research had described a prolonged process that could take place over months involving the use of threats and incentives to win a child's compliance [55*]; later research in four European countries, funded by the EU [56*] has focused on the use of the Internet as a medium via which the grooming process takes place. This suggests that adolescent girls are most likely to be targeted (the mean victim age was 13 years) and that in some cases the Internet has altered the grooming process, providing anonymity and increased access to a potential pool of victims, particularly via social networking sites. The process has also shortened; a content analysis of offender chat logs held by police demonstrated that the first conversation between the perpetrator and the child can become almost immediately sexualized, to an extent that it is almost redundant to describe the interaction in terms of a traditional grooming process [56*]. Offenders now employ a variety of techniques in order to manipulate children in the online grooming process, including bribes and incentives, threats, controlling, overt manipulation and intimidation

[57]. The techniques employed depend upon factors including the child's response, the offenders personality and the context in which the interaction takes place [56*].

Prevalence

The prevalence of adult online sexual interaction with children or adolescents varies depending on the method employed. Most research has employed self-completion surveys with a random sample of the general child population. A study surveying an adult online population reported that 7.1% of participants had communicated about a sexual topic with unknown adolescents and 0.5% with children most of whom were female [58]. Research in the US found that 9% of 10-17 year olds reported having experienced unwanted sexual solicitation [59*].

Risk factors

Little is known about the characteristics of online offenders who approach adolescent girls. A U.S. study explored differences between convicted stranger online-meeting offenders and know–in-person online offenders. In each group, about half were aged 25 years or younger and about half were employed full-time; most were unmarried and did not live with partners. Few had previous sexual offence convictions against children. Approximately 15% possessed child indecent images when they were arrested. Know-in-person/online offenders were more likely to live with children, have histories of violent behaviour, problems with drugs or alcohol, and previous convictions for non-sexual offences [55*]. The impact of grooming techniques can create additional psychological damage over and above the sexual abuse. This can result in long term levels of mistrust and damaged self-concept impacting on future relating ability and attachment [54].

Legal initiatives

Sexual solicitation or grooming is now a legal concept in many countries. A European Council directive on combating child sexual abuse and sexual exploitation (including online grooming) and child pornography seeks to curb the exploitation of children on the

Internet was introduced in 2011, and member states were given two years to implement the legislation at national level. Member states not complying will be fined by Europol [60]. Grooming legislation has been in place in some EU countries for a number of years, notably in England & Wales (SoA, 2003: s15), Finland (RL, code 1998:563) and Sweden (SFS, code 2009:343) [56*].

Conclusion

Cyber safety is an important issue in the domains considered. Estimates of prevalence of cyber bullying and harassment vary, with continuing disputes about definition and measurement. Although most studies have been cross-sectional, there appear to be significant negative correlates of involvement. Sexting is an area where some increase has been identified. Although viewing pornography is predominately a male activity, females are usually the victims of this. Sexual solicitation/grooming techniques are changing, and can create psychological damage. A variety of coping strategies and interventions are available, but need more evaluation; legal initiatives are an important component.

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