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The Harms of Pornography Exposure Among Children and Young People

Exposure to pornography is routine among children and young people, with a range of notable and often troubling effects. Particularly among younger children, exposure to pornography may be disturbing or upsetting. Exposure to pornography helps to sustain young people’s adherence to sexist and unhealthy notions of sex and relationships. And, especially among boys and young men who are frequent consumers of pornography, including of more violent materials, consumption intensifies attitudes supportive of sexual coercion and increases their likelihood of perpetrating assault. While children and young people are sexual beings and deserve age-appropriate materials on sex and sexuality, pornography is a poor, and indeed dangerous, sex educator. Copyright © 2009 John Wiley & Sons, Ltd.

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Children and young people are routinely exposed to pornography. They encounter sexually explicit images while on the Internet, some watch X-rated videos and, like adults, they live in a culture increasingly saturated in sexualised representations. What is the impact among children and young people of exposure to pornography? This article explores the likely effects of children’s and young people’s exposure to sexually explicit media. It argues that while there are disagreements over how to judge pornography’s effects, pornography exposure can lead to emotional disturbance, sexual knowledge and liberalised attitudes, shifts in sexual behaviour, and sexist and objectifying understandings. Particularly for boys and young men, the use of pornography may exacerbate violence-supportive social norms and encourage their participation in sexual abuse.

This review focuses on children’s and young people’s exposure to pornography, rather than children *in* pornography,

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notwithstanding the fact that child pornography is a deeply troubling aspect of sexually explicit media. It focuses on children's and young people's own accidental and deliberate encounters with pornography, and it does not regard such exposure necessarily as a form of child abuse or child sexual abuse *per se*. At the same time, one component of child abuse is adults' deliberate or neglectful exposure of children to pornography, including adults' use of pornography to 'groom' children for sexual abuse (Russell and Purcell, 2005). This review explores the harms among children and young people associated with pornography exposure, including the intensification of their risks of both violence perpetration and victimisation.

Pornography is defined here as 'sexually explicit media that are primarily intended to sexually arouse the audience' (Malamuth, 2001, p. 11817). 'Sexually explicit' materials show 'genitals and sexual activities in unconcealed ways' (Peter and Valkenburg, 2007, p. 383). While this definition is broad enough to include literary as well as visual forms, my area of primary concern is image-centred media.

Encounters with Pornography

How are children and young people exposed to pornography? On the one hand, children and young people may deliberately seek sexually explicit materials, whether online or offline, often with motivations similar to those among adults. On the other hand, they are exposed to pornography accidentally or involuntarily. In this discussion, the term 'exposure' refers to both deliberate and accidental, voluntary and involuntary, viewing of pornography. While 'exposure' is a useful catch-all for all forms of viewing, it also obscures the complexity and diversity of viewers' relationships to pornography, discussed below.

The context for children's and young people's exposure to pornography includes a highly sexualised cultural environment (APA, 2007; Levine, 2002). The frequency and explicitness of sexual content in mainstream media has increased steadily (Strasburger and Wilson, 2002). More widely, there has been a 'pornographication' of popular culture (Attwood, 2002; Levy, 2005). In tandem with these trends, shifting information and communication technologies have allowed new forms of pornography production and exchange (Hearn, 2006).

A growing body of international scholarship documents that significant proportions of children and young people are exposed to pornography. While different studies define and assess 'pornography' and exposure in varying ways, large numbers of young people, particularly boys, are growing up in the presence

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of sexually explicit media, according to studies in Australia (Flood, 2007), Cambodia (Fordham, 2006), Canada (Check, 1995), Denmark and Norway (Sørensen and Kjørholt, 2006), Iceland (Kolbeins, 2006), Italy (Bonino *et al.*, 2006), Sweden (Forsberg, 2001; Johansson and Hammarén, 2007; Wallmyr and Welin, 2006) and Taiwan (Lin and Lin, 1996; Lo *et al.*, 1999; Lo and Wei, 2005).

Significant proportions of children and young people have been exposed to pornography online, especially accidentally and also deliberately, as I have summarised elsewhere (Duimel and de Haan, 2006; Flood, 2007; Sabina *et al.*, 2008; Soeters and van Schaik, 2006). There is evidence too that rates of unwanted exposure to pornography are increasing (Mitchell *et al.*, 2007b). Rates of deliberate consumption of Internet pornography among minors in international studies appear to vary from around one tenth to one third (Flood, 2007; Livingstone and Bober, 2004; Mitchell *et al.*, 2003).

The deliberate consumption of pornography is highly gendered among young people, as it is among adults. Males are more likely than females to use pornography, to do so repeatedly, to use it for sexual excitement and masturbation, to initiate its use (rather than be introduced to it by an intimate partner), to view it alone and in same-sex groups, and to view more types of images (Cameron *et al.*, 2005; Flood, 2007; Flood and Hamilton, 2003a; Nosko *et al.*, 2007). Males are more likely than females to be sexually aroused by pornography and to have supportive attitudes towards it (Johansson and Hammarén, 2007; Sabina *et al.*, 2008; Wallmyr and Welin, 2006).

The Effects of Exposure to Pornography

What are the likely effects of such exposure among children and young people? Three bodies of scholarship help to answer this question: a wide range of studies (1) on the impact on children of non-pornographic sexual content in the mass media (APA, 2007; Escobar-Chaves *et al.*, 2005; Strasburger and Wilson, 2002) and (2) on pornography's impact among young adults and adults in general, and (3) a small body of work on pornography exposure among minors. While this review explores effects for both pornography and other sexually oriented media, it focuses on effects which are distinctive to or heightened for pornography. Pornography may have stronger effects among children and young people than other forms of sexual media, and it may have effects on domains of sexuality which are relatively unaffected by other forms of sexual media, for two reasons. First, pornography shows a much higher degree of sexual explicitness (by definition) than other sexual media. Second, pornography's content arguably is

more sexist and hostile towards women than other sexual media content.

There are debates regarding the methodological rigour of studies of sexual and sexually explicit media's effects. Some studies are experimental, often in laboratory conditions, and involve testing the impact of exposure on participants' attitudes or behaviour. Other studies are correlational, investigating possible relationships between 'naturalistic' use of sexual or sexually explicit media (in everyday life) and attitudes or behaviour (Flood and Hamilton, 2003a). Laboratory-based studies on pornography have been criticised as excessively artificial (Boyle, 2000). However, given that they usually exclude masturbation to orgasm—a powerful physical and psychic experience central to pornographic experience—they may in fact underestimate pornography's effects (Jensen, 1998). They are criticised too for using low durations of exposure and short time scales (Thornburgh and Lin, 2002). Correlational studies do not allow determinations of causality: associations between exposure to sexual media and particular attitudes or practices may go either way, be reciprocal, or shaped by other factors such as sexual interest (Hald, 2006; Janghorbani *et al.*, 2003). Very few studies are longitudinal, tracing the use of sexual media and the formation of sexual and gender identities over time. More broadly, study participants' self-reports of attitudes and behaviours are shaped by gendered social locations and other factors (Mitchell *et al.*, 2007a). In any case, pornography by itself is unlikely to influence an individual's entire sexual expression, and consumption may be part of a broader sexual repertoire, 'a larger sexual space and sexual experimentation' (Johansson and Hammarén, 2007, p. 66).

At least three types of factor mediate the impact of exposure of pornography: the characteristics of the viewer, their own engagement with the material, and the character and context of exposure. First, research on children's consumption of sexual content in mainstream media documents that its effects are moderated by such variables as age, gender, sexual experience, physical maturation and parental involvement. Age influences children's levels of understanding of, comfort with and interest in content such as sexual humour and innuendo. Correlations between adolescent viewing of sexual media and sexual behaviour are moderated by parental involvement, including such factors as discussions of television content, communication patterns and home environments (Huston *et al.*, 1998; Malamuth and Impett, 2001). Further variables moderating the impact of pornography include the individual's cultural background (emphasis on gender equality or inequality), their home background (sexually permissive or restricted), their personality characteristics and their current emotional state (Malamuth *et al.*, 2000).

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Second, the effect of viewing pornography is influenced by the viewers’ sexual, emotional and cognitive responses to the material (Fisher and Barak, 2001; Jensen, 1998). Not a great deal is known about adolescent or adult observers of pornography, their preferences for different types of sexual content or the forms of consumption they practise (Boyle, 2000), but the effects of exposure are likely to be mediated by viewers’ interpretations and evaluations of the material (Malamuth and Impett, 2001). Children and young people are active and agentic consumers of media, using critical skills and perspectives in interpreting sexual content (Buckingham and Bragg, 2003). For example, there is evidence among Swedish youth of a convergence in critical responses to pornography over the life course, as boys become more critical and girls less so (Löfgren-Mårtenson and Månsson, 2006).

Third, the character and circumstances of exposure are important: the type of material involved, the duration and intensity of viewing, and the context (whether voluntary or involuntary, and whether solitary or collective) (Thornburgh and Lin, 2002). Little is known about how particular forms of pornography shape the significance of their use, other than in terms of homogenising categorisations of ‘violent’ and ‘non-violent’ content. In relation to the contexts for use, there is some suggestion that masturbating alone while watching pornography may lend greater intensity to the sexual images viewed (Jensen, 1998), while watching pornography in groups may enhance collective acceptance of its value systems. Thus, there are complex interactions between the viewer or reader, pornographic texts and the context of consumption (Attwood, 2002; Brown, 2000). More widely, the shifting cultural and collective dynamics of children’s and young people’s social, sexual and gender relations are likely to have a profound influence on the use, meaning and impact of pornography.

With these caveats in mind, what then are the likely effects of exposure to pornography?

Emotional and Psychological Harms Associated with Premature or Inadvertent Exposure

Children and adolescents may be shocked or disturbed by premature or inadvertent encounters with sexually explicit material *per se*. They may be at an age or developmental level where they are unaware of, inexperienced in, or uninterested in sexual activities. In a US survey, ten per cent of young people aged ten to 17 described themselves as very or extremely upset by unwanted exposure to pornography (Mitchell *et al.*, 2007b). In an Australian survey, 53 per cent of young people aged 11 to 17 had experienced something on the Internet they thought was offensive or

disgusting (Aisbett, 2001). Pornography dominated the list of content reported. The young people said that they felt 'sick', 'shocked', 'embarrassed', 'repulsed' and 'upset' (Aisbett, 2001, p. 41).

While children and adolescents are not necessarily disturbed by unwanted exposure to sexually explicit depictions, a consistent minority do experience distress, as two American studies demonstrate. In a survey of 1500 youths, six per cent of ten to 17-year olds reported that accidentally viewing a sexually explicit image had been distressing to them (Thornburgh and Lin, 2002). In another survey, 45 per cent of the 15 to 17-year olds who had stumbled across pornography were 'very' or 'somewhat' upset by it (Kaiser Family Foundation, 2001). Some children inadvertently exposed to Internet pornography are upset not by its content but by the potential reactions of their parents (Aisbett, 2001; Thornburgh and Lin, 2002).

Children's Reactions to Sexually Explicit Content are mediated both by Age and Sex

Younger children may not find such images remarkable or memorable; older children may be more upset or disturbed; while teenagers may only be annoyed (Thornburgh and Lin, 2002). Girls are more likely than boys to be troubled by sexually explicit images. In one study, 35 per cent of girls but only six per cent of boys reported that they were very upset by the experience (Kaiser Family Foundation, 2001). In another, retrospective study, males who had seen online pornography were much more likely than girls to report feeling sexual excitement, while females were much more likely to report embarrassment and disgust (Sabina *et al.*, 2008). In a study among 14–17-year olds, boys were more positive about sexually explicit websites, while most girls saw them as 'dumb', 'gross' or demeaning to females (Cameron *et al.*, 2005).

Children also may be troubled or disgusted by images or accounts of non-mainstream sexual behaviours and relations in particular, just as adults may be, given the wide range of sexual activity found on the Internet for example (Thornburgh and Lin, 2002). Videos and Internet pornography often depict sexual practices which are outside common cultural norms or even criminal, including anal intercourse, multiple partners, bondage and sado-masochism, transsexual sex, urination or defecation, bestiality and rape. Minors do encounter such material (Sabina *et al.*, 2008). Children may also be alienated, as many adult women are (Chancer, 1998), by the subordinating representations of women common in pornography.

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The Inappropriate Acceptance and Adoption of Non-mainstream Sexual Practices

A second effect of exposure to pornography concerns children’s acceptance and adoption of particular sexual practices, relations, or identities. It is possible that portrayals of the non-mainstream sexual practices identified above may incite, eroticise and give legitimacy to them. There is one version of this argument that I reject, the notion of the ‘recruitment’ of children into homosexuality. There is no evidence that being exposed to sexually explicit materials, or indeed any kind of representation, can change a person’s overall sexual orientation, their attraction to one sex or the other (Allgeier and Allgeier, 1995), although some argue for example that exposure to child pornography can inspire a sexual interest in children (Russell and Purcell, 2005).

However, it is clear that pornography can influence users’ attitudes towards and adoption of particular sexual behaviours (Thornburgh and Lin, 2002; Zillmann, 1989). Among young people, there is evidence at least of associations between pornography consumption and participation in sexual practices such as anal intercourse. Male-female anal intercourse became an almost mandatory inclusion in X-rated heterosexual videos in the 1990s (Jensen and Dines, 1998). Five studies among Swedish young people find that young men who are regular consumers of pornography are more likely to have had anal intercourse with a girl, and to have tried to perform acts they have seen in pornography, and that girls who have seen pornography also are more likely to have anal intercourse (Haggstrom-Nordin *et al.*, 2005; Johansson and Hammarén, 2007; Rogala and Tyden, 2003; Tyden *et al.*, 2001; Tyden and Rogala, 2004). Pornography consumption may have shaped these young men’s (and women’s) sexual interests and behaviours, or perhaps both their pornography consumption and participation in anal sex represent a sexually adventurous or experimental orientation.

Sexual Knowledge, Liberalised Sexual Attitudes and Earlier Sexual Involvement

Regular and frequent exposure to sexual content in mainstream media produces greater sexual knowledge and more liberal sexual attitudes among children and young people, as a series of reviews document (APA, 2007; Huston *et al.*, 1998; Strasburger and Wilson, 2002; Thornburgh and Lin, 2002; Ward, 2003). Experimental studies document that children and young people exposed to sexual media content have greater sexual knowledge (about such topics as pregnancy, menstruation, homosexuality and prostitution) than control groups, and they are more accepting of

pre-, extra- or non-marital sexual relations (Huston *et al.*, 1998). Correlational studies find associations between greater exposure to sexual content on television and the belief that one's peers are sexually active and a more favourable attitude towards recreational sex (Strasburger and Wilson, 2002). Similar if not greater effects are likely for pornography, given its explicit and decontextualised depictions of diverse sexual relations. For example, 15–18-year olds in a Swedish study who had ever watched a pornographic film were more likely than others to be less ashamed about masturbation and to see prostitution, pornography and sex without love as 'okay' (Johansson and Hammarén, 2007). In experimental studies, young men (and to some extent women) exposed to large amounts of explicit sexual content often become more supportive of and less offended by such material (Thornburgh and Lin, 2002).

There is also evidence of associations between young people's actual sexual behaviour, including early sexual involvement, and the consumption of sexual media content, including pornography (Huston *et al.*, 1998; Strasburger and Wilson, 2002; Ward, 2003; Wingwood *et al.*, 2001). Johansson and Hammarén (2007) report that young pornography users are more likely than non-users also to have had sexual intercourse, masturbated, had same-sex sex and a one-night stand. A survey of 522 African-American females aged 14 to 18 found correlations between viewing X-rated movies and having multiple sex partners, having sex more frequently and testing positive for chlamydia (Wingwood *et al.*, 2001).

Sexist, Sexually Objectifying and Inappropriately Sexualised Attitudes and Behaviours

It is well documented that sexual media, particularly sexualised representations of girls and women, can encourage girls and young women to see themselves primarily in sexual terms, to equate their worth and appeal with narrow standards of physical attractiveness, and to see themselves as sexual objects—to focus on others' sexual interest in and judgment of them rather than their own desires and interests (APA, 2007). Both correlational and experimental studies find that adolescents' and young adults' exposure to media which sexualises girls and women is associated with greater acceptance of stereotyped and sexist notions about gender and sexual roles, including notions of women as sexual objects (Frable *et al.*, 1997; Ward, 2002; Ward *et al.*, 2005; Ward and Friedman, 2006). Exposure also influences how men treat and respond to real women in subsequent interactions (APA, 2007).

Pornography is sexually explicit by definition, and much contemporary pornography offers a decontextualised portrayal of sexual behaviour, a relentless focus on female bodies, and sexist

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and callous depictions of women (Flood and Hamilton, 2003a). Given this, pornography is likely to contribute to sexually objectifying understandings of and behaviours towards girls and women. Experimental studies among adults confirm such effects (APA, 2007).

Attitudes and Behaviours related to Sexual Violence Perpetration and Victimisation

Perhaps the most troubling impact of pornography on children and young people is its influence on sexual violence. A wide range of studies on the effects of pornography have been conducted among young people aged 18 to 25, as well as older populations. Across these, there is consistent and reliable evidence that exposure to pornography is related to male sexual aggression against women (Flood and Hamilton, 2003a). This association is strongest for violent pornography and still reliable for non-violent pornography, particularly by frequent users (Malamuth *et al.*, 2000).

In experimental studies, adults show significant strengthening of attitudes supportive of sexual aggression following exposure to pornography. The association between pornography and rape-supportive attitudes is evident as a result of exposure to both non-violent pornography (showing consenting sexual activity) and violent pornography, while the latter results in significantly greater increases in violence-supportive attitudes. Exposure to sexually violent material increases male viewers’ acceptance of rape myths and erodes their empathy for victims of violence (Allen *et al.*, 1995a). Adults also show an increase in behavioural aggression following exposure to pornography, including non-violent *or* violent depictions of sexual activity (but not nudity), with stronger effects for violent pornography (Allen *et al.*, 1995b).

In studies of pornography use in everyday life, men who are high-frequency users of pornography and men who use ‘hardcore’, violent or rape pornography are more likely than others to report that they would rape or sexually harass a woman if they knew they could get away with it. And they are more likely to actually perpetrate sexual coercion and aggression (Malamuth *et al.*, 2000). There is a circular relationship among some men between sexual violence and pornography: ‘Men who are relatively high in risk for sexual aggression are more likely to be attracted to and aroused by sexually violent media . . . and may be more likely to be influenced by them’ (Malamuth *et al.*, 2000, p. 55).

While such findings cannot simply be extrapolated to children and young people, there is some evidence that high-frequency

pornography use or consumption of violent pornography is associated with sexually aggressive attitudes and behaviours among adolescent and older boys. In a study of Canadian teenagers with an average age of 14, there was a correlation between boys' frequent consumption of pornography and their agreement with the idea that it is acceptable to hold a girl down and force her to have sex (Check, 1995). Among US boys and girls aged 11 to 16, greater exposure to R- and X-rated films was related to stronger acceptance of sexual harassment (Strouse *et al.*, 1994). Among Italian adolescents aged 14 to 19, there were associations between pornography use and sexually harassing a peer or forcing someone into sex (Bonino *et al.*, 2006).

Turning to mainstream media, experimental studies among young adults find that males and females exposed to sexualised or objectifying content are more accepting of rape myths, violence-supportive and adversarial beliefs (Kalof, 1999; Lanis and Covell, 1995; Milburn *et al.*, 2000; Ward, 2002), while correlational studies among adolescents also show such associations (Cowan and Campbell, 1995; Kaestle *et al.*, 2007).

Perhaps even more troubling is the finding that growing numbers of adolescents are being convicted of possession of child pornography (Moultrie, 2006), with a New Zealand study among offenders finding that the largest group of Internet traders of child pornography are aged 15 to 19 (Carr, 2004).

Exposure to pornography may increase children's and young people's own vulnerability to sexual abuse and exploitation. Some adult perpetrators use pornography as a deliberate strategy to undermine children's abilities to avoid, resist, or escape sexual abuse (Russell and Purcell, 2005). More generally, given that pornography encourages sexist and sexually objectifying attitudes among girls and women, it may increase their vulnerability to violence. For example, an Italian study found associations among adolescent girls between viewing pornographic films and being a victim of sexual violence (Bonino *et al.*, 2006), although the causal mechanisms are unclear.

Further Negative Impacts on Young People's Relationships

Young people's use of pornography may have further negative impacts on their sexual and intimate relationships, given that research among adults highlights such impacts as decreased sexual intimacy, perceived (and actual) infidelity and sexual 'addiction'. For example, US studies find that a consistent minority of female *partners* of male regular pornography users find it damaging both for their relationships and themselves. They see their male partners' pornography use as a kind of infidelity, feel betrayal and loss, feel less desirable, and describe other negative

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effects on their relationships, sex lives and themselves (Bridges *et al.*, 2003). Other studies find that partners of adult pornography users report decreased sexual intimacy, lowered esteem and demands that they participate in activities they find objectionable (Manning, 2006). While there has been very little research on pornography use in young people’s sexual relationships, studies among Swedish young women (with a mean age of 23) find, for example, that there is an association between having viewed pornography (typically with a partner) and anal sex, with most women finding anal sex a negative experience (Tyden *et al.*, 2001). Finally, there is an emerging scholarship on sexual, internet and cybersex ‘addiction’ which suggests that some pornography consumers come to use pornography in ways which are obsessive, compulsive, and have damaging consequences for themselves or others (Cooper *et al.*, 2004; Young, 2008). Similar patterns may emerge among younger users (Sussman, 2007).

The discussion so far has focused on the negative effects of sexual and sexually explicit media, but it also has been argued that such media can have *positive* effects, including among children and young people. First, sexual material, including pornography, has been seen as educational in teaching sexual knowledge (Helsper, 2005; McKee, 2007). Second, pornography has been seen to offer a valuable and ‘sex-positive’ challenge to sexual repression and restrictive sexual norms (Duggan *et al.*, 1988; McNair, 1996). Third, gay and lesbian pornography is seen to challenge heterosexism. For example, among same-sex-attracted young people, online gay and lesbian pornography has functioned as a counter to the invisibility of same-sex sexualities in offline life (Hillier *et al.*, 2001). However, pornography’s contribution to sexual liberation is highly contested, with others arguing that it ‘sexualises and normalises inequalities’ (Russo, 1998) and that gay male pornography is complicit in pornography’s perpetuation of inequalities (Kendall, 2004).

Conclusion

The notion that sexual materials are ‘harmful to minors’ has been frequently invoked as a justification for the regulation and censorship of such materials when available to children or to both children and adults (Heins, 2001; Levine, 2002). However, children and youth are sexual beings and should be provided with age-appropriate and compelling materials on sex and sexuality. Protecting children from sexual harm does not mean protecting children from sexuality. In fact, maintaining children’s sexual ignorance fosters sexual abuse and poor sexual and emotional health. However, pornography is a poor sex educator. Most

pornography is too explicit for younger children; most shows sex in unrealistic ways and neglects intimacy and romance; most pornography is sexist; and some is based on and eroticises violence.

The body of research with which to document the impact of pornography consumption among children and young people is small, reflecting the obvious legal, ethical and practical restrictions on such research (Thornburgh and Lin, 2002). More intensive and sophisticated investigations of pornography's use, meaning and significance among young people are required. Future research should complement quantitative assessments of the extent of exposure among children and young people with close-focus, qualitative investigations of their experiences and negotiations of sexual media and the 'social practices of pornography' (Thomson, 1999). It should include examinations of emerging economies of sexual and pornographic exchange among children and young people, including the voluntary or coerced production and/or exchange of mobile phone images. It should include action research implementing and assessing strategies to mobilise young people's resistance to sexist and violence-supportive narratives in sexual media such as critical media literacy.

This review has noted a range of identifiable harms associated with exposure to pornography among children and young people. We must minimise exposure to sexist and violent sexual media and improve the kinds of sexual materials available to young people, without sacrificing sexual speech in general (Flood and Hamilton, 2003b).

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