



Sex Education

Sexuality, Society and Learning

ISSN: 1468-1811 (Print) 1472-0825 (Online) Journal homepage: www.tandfonline.com/journals/csed20

Evaluation of a sex-positive, youth-centred online pornography literacy intervention for adolescents

Kate Dawson, Gemma Sharp, Siobhán O'Higgins, Charlotte Mclvor & Pádraig macneela

To cite this article: Kate Dawson, Gemma Sharp, Siobhán O'Higgins, Charlotte Mclvor & Pádraig macneela (09 Sep 2025): Evaluation of a sex-positive, youth-centred online pornography literacy intervention for adolescents, Sex Education, DOI: [10.1080/14681811.2025.2541633](https://doi.org/10.1080/14681811.2025.2541633)

To link to this article: <https://doi.org/10.1080/14681811.2025.2541633>



Published online: 09 Sep 2025.



Submit your article to this journal [↗](#)



Article views: 29



View related articles [↗](#)



View Crossmark data [↗](#)



Evaluation of a sex-positive, youth-centred online pornography literacy intervention for adolescents

Kate Dawson^{a*}, Gemma Sharp^{b*}, Siobhán O'Higgins^a, Charlotte McIvor^c and Pádraig macneela^a

^aSchool of Psychology, University of Galway, Galway, Ireland; ^bDepartment of Neuroscience, Monash University, Melbourne, Australia; ^cDrama and Theatre Department, University of Galway, Galway, Ireland

ABSTRACT

A range of pornography literacy programmes and interventions exist to address some of the developmental concerns prompted by adolescent pornography use. Interventions to date have typically developed in line within a harm reduction approach. However, contemporary youth-centred frameworks for literacy more generally suggest that pornography literacy interventions could also contribute towards more positive outcomes for adolescents. However, this has received significantly less research attention. This study evaluated a 1.5-hour youth-centred, school-based online pornography literacy intervention for adolescents ($n = 147$) across six secondary schools in Ireland. Results showed that intervention participation was associated with reduced perceived media realism and increased sexual consent preparedness and genital self-image for both adolescent boys and girls, as well as increased sexual decision making for adolescent boys. The study's implications and limitations are discussed.

ARTICLE HISTORY

Received 1 July 2024
Accepted 28 July 2025

KEYWORDS

Pornography literacy; adolescents; sex education; genital image; sexual consent; sexual decision making

Introduction

Simplistic and often reductive assumptions underlying the 'effects' of pornography and other forms of sexual media have given rise to a variety of pornography literacy interventions. Pornography literacy is commonly presented as a necessary response to address the *assumed* health issues associated with pornography use (Albury 2014; Bengry-Howell 2012; Crabbe and Flood 2021; Davis et al. 2020; Dawson, Healy-Cullen et al. 2022; Healy-Cullen and Morison 2023; Lim et al. 2020; Nic Gabhainn, and MacNeela 2020). Societal concerns present pornography as one of the primary drivers of sexual violence perpetration, and genital self-image concerns among young people. Research has also demonstrated that some young people use pornography as a source of education related to sexual behaviour, and to learn about how genitals 'should' look and function (Dawson et al. 2022; Litsou et al. 2021; Smith et al. 2015).

There remains major controversy however about the impacts of pornography on viewers and how best this might be assessed and understood (Pathmendra et al. 2023).

CONTACT Kate Dawson  kdawson@universityofgalway.ie

*Kate Dawson and Gemma Sharp are joint first authors for this paper.

© 2025 Informa UK Limited, trading as Taylor & Francis Group

Historically, feminist approaches to porn literacy have offered a critique of pornography's reinforcement of traditional gender roles and harmful power relations (Bengry-Howell 2012; Crabbe and Flood 2021). In contrast, communication and media studies have viewed pornography and porn literacy as means of equipping people with the skills to critically consume and interpret pornographic content (Albury 2014; Byron et al. 2022; Healy-Cullen et al. 2022; Healy-Cullen and Morison 2023; McKee, Dawson, and Kang 2023). Some sexuality studies and sexuality education researchers have moved beyond this, to focus on identifying and addressing the 'gap' that pornography appears to fill in terms of sexual learning (Davis et al. 2020; Dawson, Nic Gabhainn, and MacNeela 2020; Lim et al. 2020) while cultural studies research has sought to situate pornography within a broader context by examining how pornography both shapes and reflects cultural understandings of sex. Effects studies, with which this paper is concerned, adopt a narrower focus, being interested in assessing the changes in attitudes and behavioural intentions that porn literacy can bring about.

Informed by the desire to provide an opportunity and safe space for young people to think critically about pornography, and the wish to identify the positive sexuality-related outcomes associated with developing porn literacy skills, this study sought to develop and pilot test an innovative youth-centred pornography literacy intervention with a focus on sexual consent preparedness, positive sexual decision making, and positive genital self-image among adolescents living in Ireland. More specifically, the study sought to answer the following questions.

- Is intervention participation associated with reduced perceived sexual media realism scores?
- Is intervention participation associated with more positive genital self-image scores?
- Is intervention participation associated with increased sexual consent preparedness scores?
- Is intervention participation associated with increased sexual decision-making scores?

Defining pornography literacy

Pornography literacy has been variously conceptualised in the literature. Contemporary understandings make reference to porn literacy's capacity to: understand pornography production (Dawson, Nic Gabhainn, and MacNeela 2020; Healy-Cullen et al. 2022; McKee, Dawson, and Kang 2023); challenge perceived pornography realism (Davis et al. 2020; Haste 2013); ethically consume pornography (Albury 2014; McKee, Dawson, and Kang 2023); critically appraise pornographic representations (Healy-Cullen and Morison 2023; Hutchings 2017; Lim et al. 2020); critique pornography's value as an educational tool (Bengry-Howell 2012; and facilitate positive sexual experiences with pornography use.

Hutchings (2017) defines porn literacy as 'the ability to deconstruct and critique sexual messages in pornography' (292), Dawson, Nic Gabhainn, and MacNeela (2020) see it as a means to assist young people in 'thinking critically about the content they see' (10), while Byron et al. (2022) see it as enhancing young people's 'ability to critically read porn as negative and comprising "unrealistic" portrayals of sex' (786). Critical literacy

components as part of education programmes and interventions, however, are relatively rare and many interventions simply provide information about pornography, rather than facilitate the development of analytical and evaluative skills (Chinn 2011). This kind of approach is premised on the assumption that pornography is inherently harmful, and that young people must be protected from its ‘harmful’ effects (Healy-Cullen and Morison 2023, 2024).

Approach

Healy-Cullen et al. (2022) identified two primary discourses in their exploration of young people, caregivers and educators’ views about porn literacy education – a harms mitigation discourse, and a more pragmatic response discourse. In the first of these discourses, pornography education is understood as a way of mitigating assumed harms by drawing attention to the risks associated with pornography use. In the second discourse, pornography education is seen as a valuable activity, in the face of a new (and potentially dangerous) cultural reality (Healy-Cullen et al. 2022). Within both of these discourses, dominant and taken for granted assumptions about youth and sexuality position pornography as a dangerous social ill that young people must be protected from, leaving little room to reimagine porn literacies that are built on understanding youth as agentic sexual citizens with the capacity to engage with pornography in a savvy and ethical manner (Buckingham 2008; Healy-Cullen et al. 2024; McKee 2010). Our approach is one that seeks to transcend some of these difficulties by providing a space for youth to consider the complexities of sexual media and its production. We drew from contemporary youth-centred models for porn literacy in developing the intervention content (Dawson, Nic Gabhainn, and MacNeela 2020).

Content

To date there has been little consistency regarding the content of pornography literacy programmes and interventions. In one study, Dawson, Nic Gabhainn, and MacNeela (2020) engaged with young adults to develop a socio-ecological model for pornography literacy interventions. The authors view a one-size-fits-all intervention as wholly insufficient to address the complex nature of pornography use, and the moral judgements surrounding it. Instead, they argue that at an individual level pornography education should take two separate forms: parents should provide guidance regarding the family’s values that relate to pornography use; and school-based education should focus on the promotion of critical thinking about pornography and how it relates to personal and interpersonal sexual values and desires. The young adults who were interviewed as part of Dawson, Nic Gabhainn, and MacNeela’s (2020) study described some of the issues that should be engaged with in the context of conversations about pornography. Importantly, there is a need to reduce the feelings of shame related to pornography use by stressing that it is normal and natural to be interested in exploring and talking about sex and sexuality. Some of the issues that young people identified as needing to be discussed concerned the variety of body and genital types represented in pornography (as becoming increasingly diverse, however, not necessarily reflecting one’s own body); the fact that some kinds of pornography portray violent and coercive sexual practices in a positive

light; and the tendency for the categories used in mainstream porn to reduce queer-identifying performers and communities to stereotypes (Attwood et al. 2015; Dawson, Nic Gabhainn, and MacNeela 2020; McKee et al. 2010).

Notably, many of the participants' recommendations made the underlying assumption that pornography is inherently harmful. However, as numerous studies have shown, this view is not reflected by all young people. Multiple scholars have questioned the moral panic narrative around pornography upon which many porn literacy interventions have been grounded (Chronaki 2019). Media and communications scholars in particular have emphasised that porn literacy interventions should develop 'porn literacies' in the form of a set of interpretive skills that facilitate a critical understanding that includes analysing sexual media construction; why specific forms of content are produced and the messages they convey; how the commercial interests behind pornography can perpetuate certain ideologies; and how to challenge such messaging (Attwood, Smith, and Barker 2018; McKee 2010, 2012; McKee, Dore, and Watson 2020). Scholars argue that engaging with pornography at a critical level provides a vehicle for the development of sexual citizenship, and that rather than simply being presented as a source of harm, pornography may be identified as a source of valuable understanding regarding one's sexuality. While this does not deny the possibility of potential harm, such an approach can expand our understanding of how young people engage with and interact with pornographic content (Chronaki 2019; Tsaliki and Chronaki 2020).

The project

Perhaps surprisingly, given the serious issues at stake, few evaluations of pornography literacy programmes and interventions have been conducted to date (Rothman et al. 2018; Vandenbosch and van Oosten 2017). Some limited research has however shown that participating in a porn literacy programme can increase participants' knowledge about the role of pornography in sexual learning. Other research has demonstrated that porn literacy interventions can be effective in reducing sexist views towards women among both 13–25-year-old boys and young men, and girls and young women (Vandenbosch and van Oosten 2017). Rothman et al. (2018) found that pornography literacy interventions can increase pornography-related knowledge and change an individual's attitudes towards pornography as well as their sexual behavioural intentions (Rothman et al. 2018). Very few studies to date have focused on the positive learning outcomes that pornography literacy interventions can contribute to regarding key areas of importance for adolescent sexuality and development. This was the focus of the current study which took the form of an online porn literacy development intervention.

Informed by these aims, we endeavoured to develop a series of intervention activities in a manner informed by Wright's (2011) 3 AM model for sexual media 'acquisition, activation, and application'. The 3 AM model itself builds on Bandura's (1977, 2001) work on social learning and social cognitive theory and Piaget's (1954) work on social cognition and cognitive schema. We therefore used cognitive-behavioural strategies to provoke critical thinking related to media representations.

The intervention in this study was developed in 2021 by the Active*Consent research team at the University of Galway in collaboration with colleagues at Monash University in Australia. We conducted stakeholder meetings with sex educators, pornography industry

workers, and intimacy coordinators who provided contextual information about how consent is managed on set, and how content is produced for sexual scenes in film and in the pornography industry. The intervention was designed for use with adolescents (aged 15 years and above) and young adults. It was developed in collaboration with a youth panel of 12 Irish adolescents who provided feedback on the content and message clarity. The primary aim of the intervention was to provide insight into the sexual media and pornography industry, and to prompt youth to question the depiction of sexual interactions present in such media.

There were three components to the online intervention which we titled ‘Sex on Our Screens’. After users were given access to the online programme they could complete each section at their own pace. The introduction takes approximately 10 minutes to complete. The two core sections related to body image and sexual consent each take approximately 25–30 minutes to complete, and the conclusion takes approximately 5 minutes to complete. The intervention can be accessed via an expression of interest here: <https://www.consenthub.ie/>

Module 1 - introduction and overview

Module 1 presents an overview of the intervention content, defines the key terms being discussed throughout the programme and introduces the concept of the pornography industry as a multi-billion dollar industry centred on the promotion of commercial interests. Participants are presented with research findings about how people use pornography and sexual media to learn about bodies and sexual practices (Dawson et al. 2022; Litsou et al. 2021). The module does not position mainstream pornography as being ‘good’ or ‘bad’ but simply addresses the fact that sexual media can be, and is regularly used as, an education resource. This introduces participants to the concept of observational learning – whereby individuals may learn by observing rewarded behaviour and imitating the behaviours of others. A final component introduces participants to written information, summarises the law regarding sexual media use, production, and sharing in Ireland.

Module 2 – pornography and genital self-image

Module 2 focuses on genital representations in popular media and society. Participants are presented with research findings regarding the role of pornography and sexual media in learning about one’s body – and the fact that some people say they use pornography to learn about what different parts of the body look like. An animated video presents information about performer selection and hiring in the pornography industry – i.e. that mainstream pornography has historically featured slim, white women, and muscular white men with larger than average penises as a ‘standard’ body type, implying that other body types are not the norm. Participants are introduced to research findings about the media’s role in shaping social norms, and how this may influence the viewers feelings about their own body. Participants are introduced to a variety of Photoshop techniques used to alter genital and naked bodies in popular media and pornography. Before and after activities enable participants to engage in the role of ‘editor’ to understand the processes behind visual enhancements and alterations to the bodies and genitals seen in

media. This strategy aims to positively reinforce respect for a diversity of body types, and challenge cognitive distortions about body ideals. By presenting facts about bodily diversity and editing techniques, it aims to replace potentially distorted beliefs with more accurate ones and empower body confidence. The hands-on activities in which participants engage in 'editing' roles helps them to understand the processes behind visual alterations. This can lead to attitudinal changes, such as being more critical of edited images and less reliant on media depictions of body types as desirable bodies. Participants are then invited to participate in a quiz to test their knowledge regarding male, female, transgender, and intersex-presenting genitals, and provided with factual information and age-appropriate illustrations of different genital types, including intersex genitalia, and genitals that have undergone gender affirming care. The quiz data is not collected as part of the intervention.

Module 3 – consent and sexual scripts

Module 3 introduces the concept of sexual consent as being ongoing, mutual and freely given and addresses the social construction of sexual norms around consent and non-consent. Participants engage with examples of common media scenarios that glamourise different forms of sexual violence. Underpinned by psychological theory on observational learning and vicarious reinforcement, the intervention highlights how depictions of aggressive behaviour may reinforce sexual scripts and behaviours. The intervention aims to challenge media representations that glamourise coercive sexual practices. By presenting alternative perspectives and emphasising the importance of consent, it aims to empower participants to prioritise regular check-ins with their current or prospective sexual partners. Participants engage with an illustrated animation that involves a story about a young man who asks his friend for advice on how to progress his sexual relationship. The characters in the story vary in terms of their gender, sexual orientation, race, and disability. Participants reflect on the type of advice that the friend provides and are asked to consider what they have learned so far in the intervention, and whether the advice aligns with particular norms regarding sexual behaviour. Participants also learn about the ongoing consent process involved in pornography production that is typically edited out from mainstream pornography. Finally, participants are presented with specific language with which to communicate about consent with a sexual partner.

The evaluation

Our evaluation of the intervention programme focused on four constructs – (i) perceived sexual media realism, to test whether intervention participation resulted in participants becoming more questioning of media messaging and its reliability; (ii) sexual decision making, to examine the intervention's capacity to enhance understanding of social norms regarding one's own sexual behaviour; (iii) sexual consent preparedness, to examine the intervention activities' efficacy in enhancing perceived sexual communication confidence and skill; and (iv) genital self-image, to explore whether engagement in media editing techniques, and exposure to diverse genital image depictions improved participants' overall genital self-image.

Throughout all of the above, we sought to explore whether pornography education could move beyond the harm's mitigation discourse. By focusing on the concrete realities of mainstream pornography (the primary source of pornography for adolescents) production, distribution, and consumption, we aimed to equip students with some of the critical tools needed to analyse and evaluate the sexual messages they might encounter. Within this approach we aimed to avoid moralising judgements or essentialist definitions, instead focusing on the factors that shape mainstream pornography's production and consumption.

Methodology

Study design

The study involved a non-random sample of young people aged 15–17 selected from six secondary schools in Ireland, and adopted a pre and post-test between subjects design.

Analytical justification

We chose to use a between subjects design for both practical and ethical reasons. Time constraints prevented the use of a comparative methodology. Candidate schools could not accommodate randomising and splitting the groups and delivering the intervention to the control group at a later date. While qualitative data would have added significant value to the study, a quantitative approach using validated measures facilitated data collection within the time available. Our intention is to conduct one-to-one interviews with participants in future iterations of the study, however this was beyond what was possible in this preliminary work.

Recruitment

Participants were recruited from six schools in different parts of Ireland. Secondary school teachers with whom the Active*Consent programme had previously established relationships were invited to review the intervention content and evaluation materials, and if willing to do so, distribute parental consent forms and information sheets to their students' parents. Students who received parental consent to participate were then invited to read the study information sheet, and provide their assent to participating.

Procedure

The evaluation took place as part of a 90-minute Social, Personal and Health Education class. Ten minutes were allocated to disseminating and completing the hardcopy intervention questionnaire which comprised two pages (the pre and post questionnaires). Students were invited to complete the pre-intervention questionnaire in private. Students were then invited to engage with the online intervention, which took approximately one hour to complete, in the schools PC suite. After students had completed the programme, which took approximately 1 hour, they

were invited to fill in a post-intervention questionnaire. The intervention session took approximately 1 hour and 30 minutes to complete. All participating students were entered into a draw to win a 50-Euro voucher.

Measures

The paper and pen pre-intervention and post-intervention questionnaires used survey instruments previously validated with adolescents in the USA and Ireland. Students were asked to report how strongly they agreed or disagreed (on a 5-point likert scale) with each of the statements presented. Cronbach alpha scores for the internal consistency of the original measures are presented below.

Perceived pornography realism

We used an adapted measure developed to assess media literacy (Irving, Dupen, and Berel 1998). The first 11 questions related to beliefs about students perceived realism of sexual media, for example: 'Real people look like people in sexual media' (Irving, Dupen, and Berel 1998). The term 'sexual media' was defined, in this context, as visual material that depicted naked bodies and people engaging in sexual acts, ($\alpha = .70$).

Sexual consent preparedness

A second series of six questions pertained to sexual consent preparedness, for example, 'I have all the skills I need to deal with sexual consent'. This measure was developed and validated by MacNeela et al. (2021) with a sample of Irish adolescents ($\alpha = .68$).

Sexual decision making

A third series of five questions related to students' decision making with respect to sexual activity, for example: 'I can choose to resist pressure to engage in sexual behaviour' (Austin et al. 2015) ($\alpha = .68$).

Genital self-image

A final series of (8) questions related to how students felt about their genitals, for example: 'I feel positively about my genitals' (Herbenick et al. 2011). Internal consistency was demonstrated for both the individual male ($\alpha = .89$) and female ($\alpha = .78$) genital self-image scales.

Reflexivity

Our team included researchers from the fields of psychology, health promotion, and drama and theatre studies. Intervention development was informed by both psychology and health promotion perspectives. The intervention activities were developed using the story telling techniques popular in the creative arts.

Ethical considerations

The study was reviewed on ethical grounds and approved by the University of Galway Research Ethics Committee (Reference: #2021.01.003). Participants could choose to be included in the draw for the voucher before the intervention commenced.

Analysis strategy

We conducted a series of paired samples t-tests (SPSS Version 26) (IBM Corp 2019) following testing for normality, to calculate mean difference scores between time 1 (before the intervention) and time 2 (after the intervention) for four outcomes; perceived sexual media realism, sexual decision making, sexual consent preparedness, and genital self-image. Significance was assessed at the 5% level.

Results

Participants

The final sample consisted of 147 students (95 boys and 47 girls) from 6 schools, 17% ($n = 25$) were 15 years of age, 74% ($n = 109$) were aged 16, and 9% ($n = 13$) were aged 17 at the time they participated in the study. Most participants identified as heterosexual (80%) ($n = 117$). Seventeen per cent ($n = 25$) identified as lesbian, gay, or bisexual, and 3% did not disclose their sexual orientation ($n = 5$).

Girls' pre and post intervention scores

There were significant differences and medium effect sizes in the media realism $t(46) = 4.211$, $p < .001$, $d = .61$; consent preparedness $t(46) = -2.54$, $p < .01$, $d = .37$; and genital self-image scores $t(46) = -3.759$, $p < .001$, $d = .55$ for female participants. Female participants reported that they were less likely to perceive pornographic media as realistic, felt more capable to address consent, and felt better about their genitals, after participating in the intervention. There was no significant difference in the scores between female participants pre- and post-test scores regarding sexual decision making; $t(46) = -.990$ $p = .164$, $d = .14$ (see Table 1).

Table 1. Pre- and post-intervention scores by gender.

Variable	Girls				Boys			
	Pre		Post		Pre		post	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Perceived media realism	15.47	3.59	13.23***	3.57	16.38	3.67	13.70***	3.94
Consent preparedness	22.97	2.96	23.70**	3.05	21.94	3.28	22.72**	2.98
Genital self-image	24.28	4.38	25.74***	4.28	27.41	5.10	28.16***	5.50
Decision making	21.32	2.21	21.61	2.48	20.09	2.58	20.85*	3.02

***($< .001$); **($< .01$); *($< .05$).

Boys' pre and post intervention scores

There were significant differences and medium to large effect sizes in the scores between male participants pre and post-test scores regarding media realism; $t(94) = 8.597$, $p < .001$, $d = .88$; consent preparedness; $t(94) = -3.077$, $p < .01$, $d = .31$; genital self-image $t(94) = 5.14$, $p < .001$, $d = .26$; and perceived sexual decision-making scores; $t(94) = -2.753$, $p < .01$, $d = .28$. Male participants reported that they were less likely to perceive pornographic media as realistic, felt more capable to address consent, felt better about their genitals, and felt better able to make decisions about their sexual behaviour after participating in the intervention (see [Table 1](#)).

Discussion

Findings from this study show that participating in an online pornography literacy intervention was associated with reduced perceived media realism, increased sexual consent preparedness, and better genital self-image for adolescent boys and girls, as well as increased perceived sexual decision making for boys.

By providing factual information, challenging normative messaging, and promoting alternative perspectives, the intervention aimed to encourage participants to question the messaging presented to them by various forms of sexual media. These findings support others showing that online interventions can be effective in contributing to beneficial adolescent sexual health outcomes (Fernando and Sharp 2020; Fernando et al. 2024; Guse et al. 2012; Sharp and Fernando 2023; Wadham et al. 2019). While it is difficult to be certain, the reduced perceived media realism scores may have resulted from the combination of activities related to genital self-image and sexual consent that challenged the media's depictions of over simplified sexual practices. In terms of genital self-image we engaged participants in activities that challenged body-image standards and misconceptions, and dispelled myths around genital anatomy in order to promote greater self-acceptance and self-compassion. To promote positive consent attitudes we used story-telling techniques and addressed peer-related norms to promote participants critical thinking, in the context of sexual consent negotiation.

A realist epistemological approach to sex-positive pornography literacy interventions emphasises the study of pornography as a cultural phenomenon – that is, that pornography reflects cultural ideals and standards but is not the primary reinforcer of these ideals. By adopting a realist perspective, educators can use pornography literacy as a vehicle to discuss and challenge societal standards and norms. Interventions can provide participants with a critical understanding of pornography's production and consumption, empowering adolescents and young people to consider and evaluate its role in their lives. Such an approach avoids moralising judgements or definitions of pornography as inherently harmful by focusing instead on the factors that shape pornography content.

The activities within the intervention were designed in accordance with pragmatic response discourse and were designed to promote engagement and analytical thinking. The intervention aimed to combine the sharing of information, to facilitate critical thinking skills, and to increase young people's knowledge and confidence related to their current and/or future sexual relationships. Although it was beyond the remit of this pilot

study to test which elements of the intervention were most effective, the activities provided opportunities for participants to question their existing beliefs and knowledge, to understand biases within the pornography industry's hiring practices, and to engage in activities that promote analytical skills development.

Strengths of the study

The fact-based, online, school-delivered, and professionally developed nature of the intervention material were significant strengths of this intervention, which meant that the consistent, non-judgemental messaging could be shared, and participants could engage with this sensitive topic at their own pace. This has several advantages over alternative approaches to pornography-based education. Students can sometimes feel uncomfortable engaging in group discussions about sensitive topics with their peers. Online delivery provided a judgement and moral-free discussion of contemporary topics parents, teachers or pupils may find too sensitive or difficult to address (Baker 2016; Davis et al. 2021; Dawson et al. 2024; Ollis 2016; Rothman et al. 2017; Zurcher 2017). Additionally, delivering the intervention at school meant that delivery was equitable, given that some participants came from backgrounds where parents may not be willing or capable of engaging in conversations about pornography (Davis et al. 2021; Dawson et al. 2024; Rothman et al. 2017; Zurcher 2017).

Limitations of the study

The results of the study should be considered in the light of a number of methodological limitations: notably, small sample size, the lack of comparative design and longitudinal analysis, lack of testing for critical thinking skills development, and lack of activity-specific analysis.

Experimental design and longitudinal analysis were beyond the remit of this pilot study. The short intervention window may have introduced measurement bias, priming the participants to report positive changes between the pre- and post-test scores. It is also impossible to ascertain whether the reported effect sizes speak to substantively significant changes. We do not assume a purely direct, linear or causal link between pornography media messages and audience behaviour. We recognise that the method of evaluation, i.e. using a non-random, quantitative design, is too simplistic an approach to provide a nuanced discussion about the complex, bidirectional manner in which audiences create meaning from media. We present our analysis based on isolated individual variables that do not facilitate examination of the wider cultural context or societal power structures in which participants live. Because of the small, predominantly heterosexual sample we also do not know if heterosexual students benefited more from the intervention than young people of differing sexualities.

We did not assess critical thinking as an outcome of intervention participation. We were limited by the timeframe provided by each participating school and could not administer time-intensive measures or activities to test critical thinking skills (Butler 2012). We also do not know which components of the interventions were most or least effective or which components were deemed engaging or superfluous. In addition, our sample consisted mostly of adolescent boys. We do not

know why more boys' schools agreed to participate in this study, although it may be that the parents of adolescent boys were more willing to allow their children to engage with this kind of resource because boys are more often assumed to have had exposure to pornography (Davis et al. 2021; Gesser-Edelsburg and Abed Elhadi Arabia 2018).

Conclusion

Pornography literacy programmes have an important role to play challenging body image ideals and depictions of sexual coercion that are pervasive in mainstream sexual media. Findings from this study show that a school-based online pornography literacy intervention can not only reduce the perceived realism of the sexual portrayals in pornography but can also increase genital self-image, sexual consent preparedness, and sexual decision-making scores, as well as reduce perceived sexual media realism for adolescents. While the data in this study cannot be considered representative or generalisable, they provide evidence regarding the potential of well-designed pornography literacy interventions to move beyond harm reduction to contribute to positive youth development.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the Lifes2Good Foundation.

References

- Albury, K. 2014. "Porn and Sex Education, Porn as Sex Education." *Porn Studies* 1 (1–2): 172–181. doi:10.1080/23268743.2013.863654.
- Attwood, F., M. J. Barker, P. Boynton, and J. Hancock. 2015. "Sense About Sex: Media, Sex Advice, Education and Learning." *Sex Education* 15 (5): 528–539. doi:10.1080/14681811.2015.1057635.
- Attwood, F., C. Smith, and M. Barker. 2018. "I'm Just Curious and Still Exploring myself: Young People and Pornography." *New Media & Society* 20 (10): 3738–3759. doi:10.1177/1461444818759271.
- Austin, E. W., B. E. Pinkleton, Y. C. Chen, and B. W. Austin. 2015. "Processing of Sexual Media Messages Improves Due to Media Literacy Effects on Perceived Message Desirability." *Mass Communication and Society* 18 (4): 399–421. doi:10.1080/15205436.2014.1001909.
- Baker, K. E. 2016. "Online Pornography—Should Schools Be Teaching Young People About the Risks? An Exploration of the Views of Young People and Teaching Professionals." *Sex Education* 16 (2): 213–228. doi:10.1080/14681811.2015.1090968.
- Bandura, A. 1977. *Social Learning Theory*. New York City, Englewood Cliffs.
- Bandura, A. 2001. "Social Cognitive Theory: An Agentic Perspective." *Annual Review of Psychology* 52 (1): 1–26. doi:10.1146/annurev.psych.52.1.1.
- Bengry-Howell, A. 2012. "Planet Porn: A Resource Pack for Working with Teens Around Porn." *Sex Education* 12 (3): 370–372. doi:10.1080/14681811.2012.668420.
- Buckingham, D. 2008. *Media Education: Literacy, Learning and Contemporary Culture*. Cambridge Polity.

- Butler, H. A. 2012. "Halpern Critical Thinking Assessment Predicts Real-World Outcomes of Critical Thinking." *Applied Cognitive Psychology* 26 (5): 721–729. doi:10.1002/acp.2851.
- Byron, P., A. McKee, A. Watson, K. Litsou, and R. Ingham. 2022. "Pornography and Porn Literacy 1." In *What Do We Know About the Effects of Pornography After Fifty Years of Academic Research?*, edited by A. McKee, L. Litsou, P. Byron, and R. Ingham, 65–79. London: Routledge.
- Chinn, D. 2011. "Critical Health Literacy: A Review and Critical Analysis." *Social Science & Medicine* 73 (1): 60–67. doi:10.1016/j.socscimed.2011.04.004.
- Chronaki, D. 2019. "Why Internet doesn't Necessarily Matter: Constructing Sexual Citizenship Through Pornographic Literacies." *DiGeSt: Journal of Diversity and Gender Studies* 6 (2): 61–74. doi:10.11116/digest.6.2.4.
- Crabbe, M., and M. Flood. 2021. "School-Based Education to Address pornography's Influence on Young People: A Proposed Practice Framework." *American Journal of Sexuality Education* 16 (1): 1–37. doi:10.1080/15546128.2020.1856744.
- Davis, A. C., C. Wright, M. Curtis, M. E. Hellard, M. S. C. Lim, and M. J. Temple-Smith. 2021. "Not My child': Parenting, Pornography, and Views on Education." *Journal of Family Studies* 27 (4): 573–588. doi:10.1080/13229400.2019.1657929.
- Davis, A. C., C. J. C. Wright, S. Murphy, P. Dietze, M. J. Temple-Smith, M. E. Hellard, and M. S. C. Lim. 2020. "A Digital Pornography Literacy Resource Co-Designed with Vulnerable Young People: Development of 'The Gist'." *Journal of Medical Internet Research* 22 (6): e15964. doi:10.2196/15964.
- Dawson, K., S. N. Gabhainn, R. Friday, and P. MacNeela. 2024. "Barriers and Recommendations for Parent–Child Conversations About Pornography." *Frontiers in Sociology* 9: 1349549. doi:10.3389/fsoc.2024.1349549.
- Dawson, K., S. Nic Gabhainn, and P. MacNeela. 2020. "Toward a Model of Porn Literacy: Core Concepts, Rationales, and Approaches." *The Journal of Sex Research* 57 (1): 1–15. doi:10.1080/00224499.2018.1556238.
- Dawson, K., S. Nic Gabhainn, M. Willis, and P. MacNeela. 2022. "Development of a Measure to Assess What Young Heterosexual Adults Say They Learn About Sex from Pornography." *Archives of Sexual Behavior* 51 (2): 1257–1269. doi:10.1007/s10508-021-02059-9.
- Fernando, A. N., B. Dwyer, A. Randhawa, and G. Sharp. 2024. "The Co-Design and Acceptability of a Genital Body Image Educational Video for People with a Penis." *Body Image* 51: 101751. doi:10.1016/j.bodyim.2024.101751.
- Fernando, A. N., and G. Sharp. 2020. "Genital Self-Image in Adolescent Girls: The Effectiveness of a Brief Educational Video." *Body Image* 35: 75–83. doi:10.1016/j.bodyim.2020.08.007.
- Gesser-Edelsburg, A., and M. Abed Elhadi Arabia. 2018. "Discourse on Exposure to Pornography Content Online Between Arab Adolescents and Parents: Qualitative Study on Its Impact on Sexual Education and Behavior." *Journal of Medical Internet Research* 20 (10): e11667. doi:10.2196/11667.
- Guse, K., D. Levine, S. Martins, A. Lira, J. Gaarde, W. Westmorland, and M. Gilliam. 2012. "Interventions Using New Digital Media to Improve Adolescent Sexual Health: A Systematic Review." *Journal of Adolescent Health* 51 (6): 535–543. doi:10.1016/j.jadohealth.2012.03.014.
- Haste, P. 2013. "Sex Education and Masculinity: The 'Problem' of Boys." *Gender and Education* 25 (4): 515–527. doi:10.1080/09540253.2013.789830.
- Healy-Cullen, S., and T. Morison. 2023. "Porn Literacy Education: A Critique." In *The Palgrave Encyclopedia of Sexuality Education*, edited by M. L. Rasmussen, 1–13. Online Cham: Springer International. doi:10.1007/978-3-030-95352-2_77-1.
- Healy-Cullen, S., T. Morison, K. Ross, and J. E. Taylor. 2022. "How Do Youth, Parents, and Educators Use Discursive Sexual Scripts to Make Sense of Youth Engagement with Internet Pornography?" *Porn Studies* 9 (4): 445–463. doi:10.1080/23268743.2022.2125898.
- Healy-Cullen, S., T. Morison, J. E. Taylor, and K. Taylor. 2024. "What Does it Mean to Be 'Porn literate': Perspectives of Young People, Parents and Teachers in Aotearoa New Zealand." *Culture, Health & Sexuality* 26 (2): 174–190. doi:10.1080/13691058.2023.2194355.
- Healy-Cullen, S., J. E. Taylor, T. Morison, and K. Ross. 2022. "Using Q-Methodology to Explore Stakeholder Views About Porn Literacy Education." *Sexuality Research and Social Policy* 19:549–561. <https://link.springer.com/article/10.1007/s13178-021-00570-1>.

- Herbenick, D., V. Schick, M. Reece, S. Sanders, B. Dodge, and J. D. Fortenberry. 2011. "The Female Genital Self-Image Scale (FGSIS): Results from a Nationally Representative Probability Sample of Women in the United States." *The Journal of Sexual Medicine* 8 (1): 158–166. doi:10.1111/j.1743-6109.2010.02071.x.
- Hutchings, N. 2017. "Porn Literacy: Raising Sexually Intelligent Young People." *The Journal of Sexual Medicine* 14 (Supplement_4b): e292. doi:10.1016/j.jsxm.2017.04.405.
- IBM Corp. 2019. *IBM SPSS Statistics for Windows, Version 26.0*. Armonk, NY: IBM Corp
- Irving, L. M., J. Dupen, and S. Berel. 1998. "A Media Literacy Program for High School Females." *Eating Disorders* 6 (2): 119–131. doi:10.1080/10640269808251248.
- Lim, M. S. C., K. Roode, A. C. Davis, and C. J. C. Wright. 2020. "'Censorship is cancer'. young people's support for pornography-related Initiatives." *Sex Education* 21 (6): 660–673. doi:10.1080/14681811.2020.1845133.
- Litsou, K., P. Byron, A. McKee, and R. Ingham. 2021. "Learning from Pornography: Results of a Mixed Methods Systematic Review." *Sex Education* 21 (2): 236–252. doi:10.1080/14681811.2020.1786362
- MacNeela, P., C. McIvor, L. Achtersch, A. Bharath, K. Dawson, L. Burke, R. Connolly, M. D'Eath, E. Foden, S. McGrath, et al. 2021. "Active Consent for School Communities: Overview of the Schools Programme and Research Findings." *Active-Consent-for-School-Communities-2021.pdf* (consenthub.ie).
- McKee, A. 2010. "Does Pornography Harm Young People?" *Australian Journal of Communication* 37 (1): 17–36.
- McKee, A. 2012. "Pornography as Entertainment." *Continuum: Lifelong Learning in Neurology* 26 (4): 541–552. doi:10.1080/10304312.2012.698034.
- McKee, A., K. Albury, M. Dunne, S. Grieshaber, J. Hartley, C. Lumby, and B. Mathews. 2010. "Healthy Sexual Development: A Multidisciplinary Framework for Research." *International Journal of Sexual Health* 22 (1): 14–19. doi:10.1080/19317610903393043.
- McKee, A., A. Dawson, and M. Kang. 2023. "The Criteria to Identify Pornography That Can Support Healthy Sexual Development for Young Adults: Results of an International Delphi Panel." *International Journal of Sexual Health* 35 (1): 1–12. doi:10.1080/19317611.2022.2161030.
- McKee, A., J. Dore, and A. F. Watson. 2020. "Risk, Anxiety and Fun in Safe Sex Promotion in Australia." In *Discourses of Anxiety Over Childhood and Youth Across Cultures*, edited by L. Tsaliki and D. Chronaki, 235–259. Cham: Palgrave Macmillan.
- Ollis, D. 2016. "The Challenges, Contradictions and Possibilities of Teaching About Pornography in Sex and Relationships Education (SRE): The Australian Context." In *Global Perspectives and Key Debates in Sex and Relationships Education: Addressing Issues of Gender, Sexuality, Plurality and Power*, edited by V. Sundaram and H. Sauntson, 48–67. London: Palgrave Macmillan.
- Pathmendra, P., M. Raggatt, M. S. Lim, J. L. Marino, and S. R. Skinner. 2023. "Exposure to Pornography and Adolescent Sexual Behavior: Systematic Review." *Journal of Medical Internet Research* 25: e43116. doi:10.2196/43116.
- Piaget, J. 1954. *The Construction of Reality in the Child*. London: Routledge.
- Rothman, E. F., A. Adhia, T. T. Christensen, J. Paruk, J. Alder, and N. Daley. 2018. "A Pornography Literacy Class for Youth: Results of a Feasibility and Efficacy Pilot Study." *American Journal of Sexuality Education* 13 (1): 1–17. doi:10.1080/15546128.2018.1437100.
- Rothman, E. F., J. Paruk, A. Espensen, J. R. Temple, and K. Adams. 2017. "A Qualitative Study of What US Parents Say and Do When Their Young Children See Pornography." *Academic Pediatrics* 17 (8): 844–849. doi:10.1016/j.acap.2017.04.014.
- Sharp, G. A., and A. N. Fernando. 2023. "Genital Body Image Education in Young Adolescent Girls: A Proof of Concept Pilot Study." *Body Image* 45: 318–322. doi:10.1016/j.bodyim.2023.03.012.
- Smith, C., M. Barker, and F. Attwood. 2015. "Why Do People Watch Porn?" In *New Views on Pornography*, edited by L. Comella and S. Tarrant, 267–286. Oxford: Praeger.
- Tsaliki, L., and D. Chronaki. 2020. "Introduction: Anxiety Over Childhood and Youth Across Cultures." In *Discourses of Anxiety Over Childhood and Youth Across Cultures*, edited by L. Tsaliki and D. Chronaki, 1–26. London: Palgrave Macmillan.

- Vandenbosch, L., and J. M. van Oosten. 2017. "The Relationship Between Online Pornography and the Sexual Objectification of Women: The Attenuating Role of Porn Literacy Education." *Journal of Communication* 67 (6): 1015–1036. doi:[10.1111/jcom.12341](https://doi.org/10.1111/jcom.12341).
- Wadham, E., C. Green, J. Debattista, S. Somerset, and A. Sav. 2019. "New Digital Media Interventions for Sexual Health Promotion Among Young People: A Systematic Review." *Sexual Health* 16 (2): 101–123. doi:[10.1071/SH18127](https://doi.org/10.1071/SH18127).
- Wright, P. J. 2011. "Mass Media Effects on Youth Sexual Behavior: Assessing the Claim for Causality." *Annals of the International Communication Association* 35 (1): 343–386. doi:[10.1080/23808985.2011.11679121](https://doi.org/10.1080/23808985.2011.11679121).
- Zurcher, J. D. 2017. "Exploring Descriptive Norms of Parent-Child Communication About Pornography Among Parents of Middle-Schoolers in the US." *Journal of Children and Media* 11 (4): 381–398. doi:[10.1080/17482798.2017.1312471](https://doi.org/10.1080/17482798.2017.1312471).