



The Journal of Sex Research

ISSN: 0022-4499 (Print) 1559-8519 (Online) Journal homepage: https://www.tandfonline.com/loi/hjsr20

Toward a Model of Porn Literacy: Core Concepts, **Rationales, and Approaches**

Kate Dawson, Saoirse Nic Gabhainn & Pádraig MacNeela

To cite this article: Kate Dawson, Saoirse Nic Gabhainn & Pádraig 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

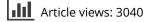
To link to this article: https://doi.org/10.1080/00224499.2018.1556238

HT.

Published online: 09 Jan 2019.



Submit your article to this journal 🕝





View related articles



View Crossmark data 🗹

Citing articles: 44 View citing articles 🖸



Toward a Model of Porn Literacy: Core Concepts, Rationales, and Approaches

Kate Dawson, Saoirse Nic Gabhainn, and Pádraig MacNeela

School of Psychology, National University of Ireland and School of Health Promotion, National University of Ireland

Although some positive outcomes for pornography engagement have been highlighted, researchers and educators have also expressed concerns about youth pornography engagement and have called for porn literacy education to be incorporated into sex education programs. As yet, there is lack of agreement regarding intervention development. This study aimed to engage participants in the identification of relevant curriculum content. Participatory methods of data collection were used with 54 young adults aged 18 to 29 to generate core concepts for porn literacy education, and these concepts were subsequently explored in group interviews. Findings suggest that the proposed learning outcomes should focus on reducing shame regarding pornography engagement and improving critical thinking skills regarding the following sexual health topics: body image comparisons and dissatisfaction; sexual and gender-based violence; fetishising of gay and transgender communities; and setting unrealistic standards for sex. Methods of engagement for porn literacy, gendered differences, and important findings that are specific to lesbian, gay, bisexual, transgender, plus (LGBT+) persons are discussed, and recommendations regarding future research and intervention development are outlined.

Young people engage with media to such a degree that mass media and popular culture have become significant factors in youth socialization (Koltay, 2011). As such, media literacy initiatives that empower people to access, produce, negotiate, and understand media (Aufderheide, 1993) have become extremely important. Increased access to more explicit sexual media, such as Internet pornography, has similarly led to calls for youth porn literacy education. However, unlike media literacy, which is a well-established area, little research exists that provides an evidence base for the development of porn literacy interventions. This study aimed to elicit young Irish adults' recommendations for adolescent pornography literacy intervention development

There remains ambiguity over what porn literacy should entail. At the forefront of the debate around the inclusion of pornography in sex education programs is the negative effects of pornography engagement, despite the fact that research shows that few people experience adverse effects from watching pornography. Research has found that small percentages of pornography viewers have reported negative effects on both their personal lives and their sex lives (Hald & Malamuth, 2008).

Rissel et al. (2017) found that 4% of the men and 1% of women in their study reported that they were addicted to pornography, and half of men who reported this said that it had a negative effect on them. However, positive uses have also been highlighted. For some youth, pornography provides an outlet to learn about sex in ways that positively affect their lives (McKenna, Green, & Smith, 2001; Miller, Hald, & Kidd, 2017). In their large-scale qualitative survey of youth and adults, aged 18 to 65 and older, Smith, Attwood, and Barker (2015) found that, for many participants, pornography helped relieve boredom, reduce everyday stress, and intensify orgasms. Some couples used it to enhance the erotic aspect of their lives, by sending each other links to videos and learning new sexual ideas. Other researchers have documented the purposes of pornography use as including sexual exploration (McKenna et al., 2001) and understanding peer group attitudes toward sexual behaviors through group viewing experiences (Löfgren-Mårtenson & Månsson, 2010)

There is inconsistency in the pornography research literature. For example, there is some evidence that pornography portrays "traditional" gender roles, such as male dominance and female submission (Klaassen & Peter, 2015). But some findings also indicate that people who had viewed pornography in the previous year held more egalitarian views than those who did not (Kohut, Baer, & Watts, 2016). Such views included positive attitudes toward women in power and less negative attitudes toward women within the workforce. Similarly, Wright and Bae (2015) found pornography consumption to be associated with

Correspondence should be addressed to Kate Dawson, National University of Ireland, School of Psychology, AMB G050 Galway. E-mail: k.dawson2@-nuigalway.ie

Color versions of one or more of the figures in the article can be found online at www.tandfonline.com/hjsr.

more positive attitudes toward access to birth control. Pornography is often criticized for its portrayal of unattainable body types; however, Davis, Carrotte, Hellard, Temple-Smith, and Lim (2017) found that for some individuals watching pornography was a liberating experience because it gave people the opportunity to see other people's genitals, while others felt that it reinforced their own and their partners' sexual expectations for genital function and aesthetic (Davis et al., 2017). Such inconsistencies within the research indicate that experiences of pornography are highly individualized.

Whatever the associated outcomes are, many youth are engaging with pornography at an age where, in many countries, they are unlikely to have had any sex education (Sinković, Štulhofer, & Božić, 2013). Although statistics on first engagement with pornography differ across countries (Hald & Mulya, 2013; Lim, Agius, Carrotte, Vella, & Hellard, 2017), research consistently demonstrates that most men first engage with pornography in childhood or early adolescence (Davis et al., 2017; Harper & Hodgins, 2016). Given that significant proportions of male and female adolescents report recent use of pornography (Peter & Valkenburg, 2016), it is clear that engagement with pornography is now a critical influence on the sexual socialization of youth. Although there could be a positive impact of such critical porn engagement, concerns have also been raised (Brown & L'Engle, 2009). There is a clear need to support youth to develop the competence to distinguish positive and negative models of sexual health and relationships from the pornography that they watch.

Ultimately, the experiences associated with pornography engagement are varied, and therefore the primary goal of porn literacy education is for individuals to equip themselves to critique sexualized media and construct their own meanings from content (DeFur, 2014). As one of the primary concerns regarding youth pornography engagement is the impact it can have on shaping sexual scripts and expectations (Lofgren-Mårtenson & Månsson, 2010), developing porn literacy skills could assist individuals to anticipate sexual outcomes that are realistic for their lives. Set against these aspirations, porn literacy is a relatively new concept; as such, there is little agreement or primary research available regarding what porn literacy education should entail (Albury, 2014).

The concept of "porn literacy" has evolved from a base of research into media literacy, an area which has developed over time. Originally, media literacy models focused on traditional print and audiovisual material. However, this concept has expanded to encompass the Internet and other new forms of media (Livingstone, 2004; Livingstone, Papaioannou, Pérez, & Wijnen, 2017). Contemporary understandings of the core principles of media literacy include the "active inquiry and critical thinking about the messages we receive and create" (Alliance for Media Literate America [AMLA], 2007, p. 3) so that "people use their individual skills, beliefs and experiences to construct their own meanings from media messages" (Alliance for Media Literate America, 2007, p. 7). Media literacy is argued by various media theorists (e.g., Austin, Pinkleton, & Funabiki, 2007)

to improve critical thinking skills, which are in turn proposed to support youth in health-related decision making (Elias, Gara, Schuyler, Branden-Muller, & Sayette, 1991).

Research shows that youth who participate in media literacy programs can develop skills to critique media messages and in turn develop more realistic expectancies (Austin, Pinkleton, & Johnson, 2006). Critical thinking is integral to media literacy, defined as "a metacognitive process that refers to purposeful, self-regulatory, reflective judgment consisting of a subset of skills (i.e., analysis, evaluation and inference) and dispositions (e.g., open-mindedness, perseverance and organisation), that when used appropriately, enhance the likelihood of drawing a reasonable conclusion or solving a problem" (Dwyer, Hogan, & Stewart, 2014, p. 43). Critical thinking has also been shown to be a protective factor against a variety of negative outcomes and has been linked to prevention of body dissatisfaction among adolescent girls (Paxton, McLean, Gollings, Faulkner, & Wertheim, 2007) and drug abuse preventive behaviors (Moshki, Hassanzade, & Taymoori, 2014). In addition, critical thinking has also been associated with a range of positive outcomes for youth, such as leadership (Burbach, Matkin, & Fritz, 2004) and the capacity for higher-order thinking (Fazey, 2010). Youth who acquire media literacy skills have been shown to have greater capacity to deconstruct media messages and the intentions behind their presentation than those who do not (Austin et al., 2006). This can result in individuals challenging or becoming skeptical of content that they see and in turn beginning to adopt more realistic expectations for sex (Brown & L'Engle, 2009) but may also result in increased confidence around sexual decision making (Pinkleton, Austin, Chen, & Cohen, 2012).

Media literacy interventions have been shown to be effective across a variety of topics, age groups, and settings (Jeong, Cho, & Hwang, 2012), and such interventions have been provided across delivery methods. Traditional methods like group discussions facilitate active audience engagement and foster the development of communication skills (Alliance for Media Literate America, 2007). Group discussions facilitate critical thinking as they require greater mental effort (Jeong et al., 2012) and are found to be effective within media literacy interventions (Banerjee & Kubey, 2013). More generally, sexual health education programs are increasingly employing digital platforms to engage youth and improve sexual health-related outcomes. A 2012 review demonstrated the effectiveness of new digital media, including Web site-based interventions, online discussion forums, and mobile phone-based interventions (Guse et al., 2012). Many showed significant increases in knowledge acquisition (Marsch et al., 2011), as well as positive outcomes in reducing risk behaviors for sexually active youth (Tortolero et al., 2010). With specific regard to sexual health promotion, evaluations of media literacy interventions illustrate their potential translation to media-acquired attitudes and sexual decision making. For instance, in a U.S. sample, interventions have been linked to delaying age of first sex by improving participants' beliefs in their ability to delay sexual activity (Pinkleton et al., 2012). In another study, older U.S. adolescents in a media literacy intervention group reported less risk behaviors, such as drug or alcohol consumption, before or during a sexual encounter, increased sexual health–related knowledge, and lower acceptance of rape myths (Scull, Kupersmidt, Malik, & Keefe, 2018) than those in the control group. Findings from a recent meta-analysis indicate that media literacy interventions facilitate adolescents in making healthier choices in healthcompromising situations (Vahedi, Sibalis, & Sutherland, 2018).

Porn literacy has been defined as "a framework from which young people can critically examine and make sense of the sexual images they see" (Hutchings, 2017, p. 292). However, in developing a porn literacy approach further it is important to distinguish pornography as a particular form of sexual media. Overall, sexual media and their degree of explicitness exist on a spectrum, ranging from nonexplicit ("e.g., a children's television show that depicts two characters holding hands"; Rothman et al., 2018, p. 2) to somewhat explicit (e.g., underwear or lingerie advertisements) to explicit (e.g., topless women in music videos) to very explicit (e.g., footage of people having sex with close-up shots of their genitals). As such, sexual media research should look at the degree of sexual explicitness of media in which youth engage (Rothman et al., 2018). Although porn literacy is derived from media literacy, it differs from other forms of sexual media that have been studied, such as advertisements (Austin, Pinkleton, Chen, & Austin, 2015), in that the content is more explicit and includes actions that are unlikely to be seen in other types of sexual media, like male and female ejaculation. Media literacy interventions can also be modeled on a similar continuum, with porn literacy education at the one extreme. Approaching sexual media in this way can help ensure that media literacy interventions coincide with appropriate age and life stages.

Yet within sex education programs, many inconsistencies exist in how we inform, discuss, or communicate with youth about pornography. Some interventions reflect the core principles of media literacy and critical engagement and aim to facilitate youth in exploring and understanding their own values about pornography and how a person's values impact their pornography engagement (DeFur, 2014). Others, such as Planet Porn, aim to stimulate discussion, challenge negative messages, and enable youth to develop positive relationships by helping them to distinguish between fantasy and reality (Bishtraining, 2017). Some aim to increase educators' knowledge and confidence in facilitating discussions on pornography by providing up-to-date information on relevant research and by encouraging educators to challenge their own attitudes regarding pornography (Owen & Gowen, 2014). Interventions vary in content, with some referring to outcomes, such as "porn addiction" (Rutland-Centre, 2018), that have not accumulated a sufficient amount of evidence to be established in the literature.

Pornography literacy is often understood as being different for adults and adolescents. For adults, pornography has been used as an educational resource to increase understandings of safe sex and queer sex (Dawson, Cooper, & Moore, 2018). In contrast, pornography education for minors has focused on achieving greater skepticism of the portrayal of sex and the sexual messages within pornography (Albury, 2014). There is

a developmental component to consider in conceptualizing porn literacy. The implementation and delivery of adult and youth porn literacy will differ because, unlike adult porn literacy, minors cannot directly critique the text in question because of legal concerns. Several pornography interventions exist that have utilized indirect strategies to engage youth, including engagement with documentaries (Crabbe & Corlett, 2011); rather than providing depictions of explicit content, they employ humor to discuss the distinctions between "porn sex and real sex" (KN Creative Lab, 2013). However, there remains a relative dearth of studies on the effectiveness of porn literacy interventions (Vandenbosch & van Oosten, 2017). Buckingham (2008) argued that contemporary media literacy education should adopt a "student-centred perspective, which begins from young people's existing knowledge and experience of media" (p. 13) and should be based on empirical evidence and amenable to measurement; many have not been evaluated, and it is impossible to establish the quality of an intervention or its effectiveness. In addition, it is also difficult to determine which interventions are based on theory.

A small number of studies have been carried out in recent years that have begun to look at the effectiveness of pornography interventions for young people. One longitudinal study of 1,947 Dutch 13- to 25-year-olds found that the more a young person had learned about the use of sexually explicit Internet material (SEIM) from their school-based sex education, the weaker their sexist attitudes became over time (Vandenbosch & van Oosten, 2017). The authors asserted that participants engaged in porn literacy education by learning about SEIM. Rothman et al. (2018) have recently developed a pornography education curriculum that aims to provide youth with evidencebased information focusing on consent and sexual orientation. During evaluation, American youth between the ages of 14 and 18 completed pre- and post-intervention questionnaires. Their findings showed significant knowledge improvements regarding pornography and the law, including the posting and distributing of sexual images. Participants demonstrated significant attitudinal changes and were less likely to believe that pornography was a good source of sexual information. Reported behavioral intentions also changed in that participants were more likely to report that they would seek advice and support if they felt that they were experiencing problems with pornography engagement. These studies provide some promising evidence for the effectiveness of pornography education; however, further research is required to understand which components of interventions are effective and also to differentiate which interventions aim to provide information about pornography and which aim to promote critical engagement with content, thus reflecting the principles of media literacy.

Positive and negative outcomes of pornography engagement have been demonstrated in the literature (Hald & Malamuth, 2008; Rissel et al., 2017). Therefore, porn literacy will need to be nuanced, providing opportunities to explore negative, neutral, and positive dimensions. In the instance of bondage, dominance, submission, and sadomasochism (BDSM), this could involve recognition that, in isolation, individual BDSM practices such as whipping or slapping could be defined as violent. Yet when integrated with the person's sexual identity and relationships, BDSM practices can contribute to fulfilling and enjoyable experiences (Hébert & Weaver, 2015). Discussing the portrayal of BDSM scenes provides opportunities for people to explore sexual communication and consent, responsibility and respect, and the differentiation between nonconsensual and consensual aggression. In considering a holistic approach to sexual well-being, which is underpinned by the 15 domains identified for the multidisciplinary framework for healthy sexual development (McKee et al., 2010) and the World Health Organization (2006) definition of sexual health, there are likely to be other sexual behaviors, attitudes, and beliefs which also have personal meaning and can be interpreted subjectively and which warrant exploration.

As individuals are likely to first engage with pornography during their youth, porn literacy should begin with young people. Yet many health education interventions for youth are based on adult models of health and run the risk of failing to engage and inform their targeted demographic (Coll, O'Sullivan, & Enright, 2017). To bridge the gap between young people's lived experiences and sexual health theory and practice, youth must play a more collaborative role in empirical research (Eglington, 2008). Participatory research methods are being increasingly used in health education research for this purpose (O'Higgins & Gabhainn, 2010). The underlying principles in participatory research, including youth engagement, advocacy, and empowerment, mean that youth are supported to represent their own realities, feel valued in their contributions, and produce findings that are reflective of their own needs (Szmigin et al., 2008). Participatory research strategies were employed in this study to develop a model of porn literacy using a youth-centered approach.

The Current Research

The current study aimed to explore young Irish adults' beliefs about pornography, their suggestions for the core concepts, and the recommended educational approaches that should be incorporated into porn literacy education to develop a model for youth porn literacy education.

Method

Study Design

This study had a group qualitative design underpinned by a participatory epistemology, which used flexible brainstorming methods to actively involve stakeholders aged 18 to 29. Six workshops were held. Each workshop included a participatory activity and a facilitated group discussion. The workshops took place between February and May 2017. The rationale for the number of groups held was based on data saturation (Fusch & Ness, 2015). Groups with a minimum of six and a maximum of 12 participants were required to facilitate effective group discussion (Fern, 1982). To ensure the inclusion of lesbian, gay, bisexual, transgender, plus (LGBT+) persons, we purposefully oversampled LGBT+ students; five workshops consisted of primarily heterosexual participants, and all participants identified as LGBT+ in the sixth group. The participatory phase of the research empowered participants to establish their own shared meaning and representation through the group activity and aimed to obtain information on what youth believed should be the core concepts for porn literacy education. The group discussion that followed provided the opportunity to further describe the rationale for their core concept choices and the recommended methodologies to deliver the content. To standardize the meaning of pornography for the purpose of this study, the workshop began with the researcher describing the following definition of pornography: "Pornography refers to any sexually explicit films, video clips or pictures displaying the genital area, which intends to sexually arouse the viewer" (Short, Black, Smith, Wetterneck, & Wells, 2012, p. 9).

Participatory Activity. For successful vouth interventions to be developed, young people must play a more collaborative role in empirical research (Eglington, 2008). Participatory methods for data collection have been shown to be effective in engaging youth in sexual health research (e.g., O'Higgins & Gabhainn, 2010). As conducted in previous research (O'Higgins & Gabhainn, 2010), the first element of the group activity was to work individually to generate participants' own responses to a trigger question: "What should teenagers learn about porn as part of porn education workshops?" They were invited to record these ideas on individual cards, which were then collected by the researcher, combined, and then shuffled. This was followed by collective brainstorming and integration of the individual responses. Participants were divided into small groups of four to six people, each of which was given an equal number of the shuffled cards. The small groups collaborated to thematically analyze the individual answers on the cards to address the trigger question. They grouped responses into themes and generated a label for each theme. These generated theme headings were presented by the groups on flip-chart paper and are presented in Table 1.

Each group was then invited to work collaboratively to present ideas on the most effective method to deliver the core messages. Flip-chart paper was made available for participants who used it to report the findings back to the larger group. An example of such an illustration is provided in Figure 1.

Each group presented the core concepts that its members believed should be discussed in porn literacy education. The following core concepts for porn literacy education were highlighted by participants: (1) shame and acceptability, (2) sexual communication and consent, (3) body and genital image, (4) the realities of sex, (5) sexual functioning, (6) safe sex, and (7) porn as education. Two additional issues emerged during the discussions, one of which was relevant

February 22 GD	March 2 GD	March 16 GD	April 8 GD	April 25 GD	May 9 GD
Consent	Consent	Consent	 Consent/communication is key 	Consent/ communication	• Consent (1)
 Porn is unrealistic 	 Unrealistic 		 It's not reality/sets unrealistic expectations 	 Expectations/reality 	• Unrealistic (4)
 Unrealistic body image 	 Body image issues 	 Negative body image 	• Don't compare your body	 Body image 	
	 Safe sex 	• Can be addictive			Safety (2)Protection(3)
 Porn is okay to watch (or not watch) 	 Curiosity is normal 	 It's okay to talk about it 	• It's healthy and okay to watch porn if you want	Variety/acceptance	• Healthy porn habits (7)
		 Can be educational 	 Porn isn't educational 	 Educational 	• Effects (6)
 Awareness of porn 		 Awareness 	• There's an industry behind it	 It's an industry 	 Misogyny (5)

 Table 1. Generated Theme Headings by Workshop Date

Note. Group on May 9 ranked their themes in order of importance. GD = group discussion.

to developing an underlying approach for porn literacy, which involved the facilitation of critical thinking. The second referred to the perspectives of LGBT+ participants, in which the sexualization and fetishizing of LGBT+ groups emerged as a salient theme, which did not emerge within the primarily heterosexual group discussions. These themes are presented sequentially in the text that follows, along with the proposed approaches to delivering the core messages identified by participants, including reference to content, mechanisms, and timing of such porn literacy responses.

Group Discussion. Group discussions can provide useful information when little is known about a topic (Bertrand, Brown, & Ward, 1992). The semistructured format of a group discussion can facilitate conversations that provide

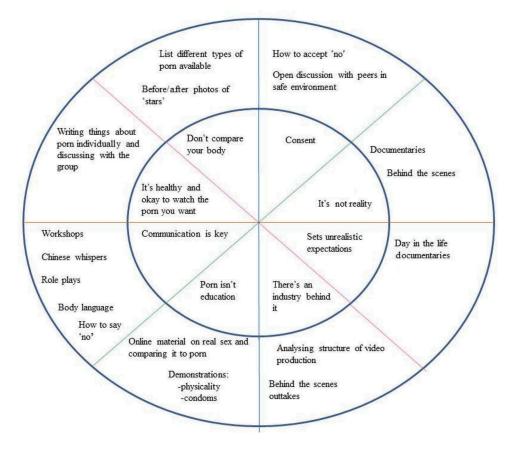


Figure 1. Workshop number 5, group work output. Inner circle: Group response to question "What are the core concepts that should be included for teenagers in porn education?" Outer circle: Group responses to question "What is the best way to engage teenagers so that we can get these messages across?"

diverse opinions and can enable the researcher to gather information about multiple experience and beliefs at one time (Frith, 2000). Many experience discomfort and embarrassment when talking about sex (Frith, 2000). Frith (2000) posited that one of the most challenging aspects of qualitative sex research is to create an environment where participants feel comfortable enough to talk about sex. The two female researchers who facilitated the group discussions had a background working in the delivery of sex education. In addition, the majority of participants were unknown to both facilitators; however, some students had been taught college courses by one researcher, and this may have increased discomfort for some students.

The purpose of the group discussions was to enable greater understanding of participants' views of adolescent needs regarding pornography. The following prompts for discussion were employed: Participants were asked (1) to provide clarity and information regarding what their identified core concepts meant, (2) why the themes were particularly important for youth, and (3) to provide recommendations for how to engage youth in porn literacy education. Each group discussion lasted 50 to 90 minutes. In total the workshops lasted between 120 and 150 minutes. Verbal data were audiorecorded with the permission of participants and subsequently transcribed verbatim.

Recruitment

Data were collected at the university in the West of Ireland and at an LGBT+ youth organization. A convenience sample of 54 students and LGBT+ youth center members between 18 and 29 years old was invited to participate in the study via the university student e-mail system and through contacting youth organizations and university's student-led societies. Eleven students were contacted via the Department of Psychology research participation system and received research credits for participating. In total, 63 students expressed interest in participating. The final sample consisted of 54 students who were eligible (i.e., were over the age of 18 and who gave their informed consent to participating). In total, eight participated in the first group discussion, nine in the second group, nine in the third, 11 in the fourth, eight in the fifth, and nine in the sixth and final group. Issues related to LGBT+ sexuality are often omitted from sex education initiatives, and therefore we purposefully oversampled LGBT+ participants to ensure adequate representation of LGBT+ youth.

A mixed-gender sample of 18- to 29-year-olds was chosen for a number of reasons. The intention was to explore both cisgender and transgender men and women, as well as nonbinary perspectives, on pornography usage, and thus an approximately equal sampling of each gender was preferred. Research suggests some gender-specific aspects of the meaning and usage of pornography. While individuals of all genders typically first engage with pornography during adolescence, adolescent women seek out pornography significantly less often than do adolescent men (Ybarra & Mitchell, 2005; Peter & Valkenburg, 2016). Pornography engagement for women increases during early adulthood, and many emerging adult women have diverse views about pornography. Second, perspectives on pornography from people who have learned lessons about their sexuality and sexual experiences were considered most valuable. Although sexual experience was not a criterion for inclusion in this research, this age cohort was more likely than younger adolescents to have established sexual preferences, greater pornography engagement (Sinković et al., 2013), sexual relationships, and increased opportunity for critical reflection on pornography.

The majority of participants were university students (79%), and 21% attended the LGBT+ youth organization (for detailed participant information, see Table 2).

Measures

The group discussions followed a semistructured format. Participants were invited to discuss the findings from the participatory activity. In addition, the following questions were used to prompt discussion:

- 1. What should the core messages for porn education be and why?
- 2. Can porn function as an educator? How/why not?
- 3. How is sex portrayed in porn?
- 4. What activities should be included in porn education?
- 5. Who should deliver porn education workshops?

Procedure

There were three routes to participation. Recruitment posters were displayed on the university campus. Electronic versions were shared online by the Students Union weekly e-mail and via the Students Union Facebook page. Posters described that participants would take part in a group discussion and share their ideas for designing

Table 2. Sociodemographic Characteristics, by Gender and Overall Sample (N = 54)

Variables	Men (<i>n</i> = 23)	Women (<i>n</i> = 29)	Nonbinary $(n = 2)$
Age			
18–20	3 (13)	13 (44.8)	1 (50)
21–23	6 (26.1)	6 (20.7)	1 (50)
24–26	13 (56.5)	7 (24.1)	0
27–29	1 (4.3)	3 (10.3)	0
Nationality			
Irish	22 (95.7)	27 (93.1)	2 (100)
Non-Irish	1 (4.3)	2 (6.9)	0
Sexual orientation			
Heterosexual	16 (69.6)	22 (75.9)	0
Homosexual	6 (26.1)	1 (3.4)	2 (100)
Bisexual	0	4 (13.8)	0
Pansexual	0	1 (3.4)	0
Undisclosed	1 (4.3)	1 (3.4)	0
Porn user			
Yes	19 (82.6)	17 (58.6)	2 (100)
No	3 (13)	12 (41.4)	0
Undisclosed	1 (4.3)	0	0

a pornography education intervention. Potential participants were invited to e-mail the first author to express their interest in participating; they were then provided with detailed study information prior to participation and once again at the beginning of the study. Information on free counseling services was provided to all participants. Participants gave informed consent on the day of the group meeting. Brief participant demographic information was collected at the beginning of each workshop. The study received full approval from the Research Ethics Committee at the National University of Ireland Galway.

Data Analysis. The group discussion differed from traditional focus groups (Kitzinger, 1995) in that the overarching themes had been previously generated by the participants themselves. Consistent with Strauss and Corbin's (1998) understanding of inductive analysis, which states that "[t]he researcher begins with an area of study and allows the theory to emerge from the data" (p. 12), the primary purpose of the qualitative analysis was to identify the dominant beliefs inherent in the data that related to each of the previously generated themes. An inductive approach was taken, using a constructivist approach to thematic analysis (Braun & Clarke, 2006). Data were analyzed using NVivo software (OSR International Pty Ltd, 2012). Analysis of group discussion data was based on the prompts employed to stimulate the discussion and further understand the participants' choices, their beliefs about the influence of pornography on youth, and the most effective methods to engage youth in porn literacy education.

The first author selected and coded a transcript picked at random. The codes were later reviewed and discussed by the second and third authors. The coding scheme was based on the core concepts that emerged during the concept generation phase. The first author continued to code the transcripts by categorizing quotations under the core concepts. Once this process was complete, the quotations representing the arguments that emerged most frequently within each of these concepts were reviewed with the second and third authors. This facilitated the attribution of quotations in the Results section that follows. The quotes included here were chosen to be representative of the views of participants.

Results

Core Concepts for Porn Literacy Education

Participants identified eight core concepts for porn literacy education that should be underpinned by an approach which facilitates critical thinking around the following topics: reducing shame and increasing acceptability of pornography engagement; discussion of sexual communication and sexual consent; body and genital image; the realities of sex; pleasure and orgasm; physical safety and sex; the role of pornography as an educator; and the sexualization and fetishizing of LGBT + people. **Reduce Shame and Increase Acceptability.** Throughout the group discussions, participants spoke about a variety of positive and negative implications associated with pornography engagement for youth. General language was often used, such as "some people" or "they," a form of language use that does not link to personal use of pornography and may reflect a discomfort with direct personal references of this kind. Many believed that encouraging open communication could challenge the negative effects and highlight positive outcomes. More specifically, tackling stigma, reducing shame, and eliminating discomfort around discussing pornography were considered central to this.

Some people just enjoy porn. Some people enjoy making porn, and I think it's about highlighting those things as well, but it's about a balance of, you know, telling them about the negatives while telling them about the positives too. While also not like trying to repress how they are expressing themselves sexually. (Heterosexual woman, age 22)

Participants believed that such stigma could be reduced if accurate social norms information around accessibility, ubiquity, and frequency of pornography engagement were highlighted: "Acknowledging its prevalence is one way to normalize it so you don't end up feeling ashamed, as a boy or a girl, for watching porn" (Bisexual woman, age 22).

Sexual Communication and Consent. Participants argued that promoting sexual consent was central to porn literacy education. Many believed, because of their own experiences, that pornography often depicted nonconsensual, violent, or rough sex, and that such representations glamorized aggression, particularly against women: "The mainstream heterosexual one seems to be a lot of the guy ravishing the woman until she can't even speak" (homosexual nonbinary, age 19). Speaking more generally, others discussed how such approaches diminished the real-life importance of sexual communication. Participants provided examples of footage they had seen that they believed trivialized sexual violence, including sexual coercion, the portrayal of power imbalances, and scenes featuring adults engaging in sex with (people who were portrayed as) minors:

In some porn it might not be like rape, but it might be like cajoling or pressuring. There's one like teacher-student, like, oh, you do something bad, you have to do this. But like it wouldn't be as kind of obvious that it was like sexual assault. (Bisexual woman, age 19)

Concerns over the impact of pornography on the sexual scripts of young people were frequently discussed. Scenes featuring coercion or token resistance were believed to influence perceptions around acceptable sexual behavior for young people.

It's the fake "no" that can throw off some kids because they don't understand. They weren't thinking, "Oh this is acting.

This is part of the script." ... So you're kind of taught from a young age that the chase is part of it and "no" is up for debate. (Heterosexual woman, age 26)

Activities were proposed that would enhance young people's understanding of nonconsent in pornography. These involved the identification of nonconsensual pornography-based scripts by reviewing videos or discussing the portrayal of sexual aggression and lack of sexual communication. Many involved improving confidence and communication skills by practicing both asking for and giving consent, the use of sexual language, and having to negotiate different situations. One heterosexual woman, age 29, suggested, "Giving people options of rating what they would feel comfortable saying and what they wouldn't feel comfortable saying, in terms of asking and responding to different sexual requests."

Body and Genital Image. Conflicting views about the impact of exposure to body types in pornography emerged. One homosexual participant, age 19, spoke from their own experience and argued that pornography provided a platform for sexually inexperienced people to explore their own body aesthetics: "It allows you to figure out who you are, what does your body look like in comparison to someone else, especially if you haven't had sex with someone else." More generally, however, the dominant discourse was that although pornography depicted a variety of body types, most reinforced physical attractiveness ideals:

You can find whatever you're into [in terms of attraction]. If you're into bigger girls, smaller girls, you name, it you can find it. So you can make an argument that it is kind of inclusive for everyone. But then there's the other side of the coin, where the mainstream is what everyone's idea of a perfect woman or man is. (Heterosexual man, age 26)

The majority of women held more critical views of pornography but often spoke in terms of the general "other" in this regard, rather than referring to their own experiences. They felt that pornography reinforced a societal standard of beauty that is largely unattainable by the average person. Women frequently made reference to slim builds, genital representations, and pubic hair norms set by pornography. Although many participants spoke of such attributes being unrealistic, they described the many ways in which exposure to these body types could influence how a person feels about his or her body. Female participants discussed how women in particular could be affected not only by their own but also by their male partner's pornography engagement: "I think especially if you knew anything about, say, if your boyfriend watched porn a lot and you knew he liked certain actresses, and you were like, 'Oh my God, I look nothing like them" (heterosexual woman, age 24).

Impact on genital self-image was discussed by male participants as an issue that might affect other men. It was the muscular physiques of pornography actors that were cited more frequently as a potential source for their personal comparisons to take place: "It is going to knock your confidence a bit like if you feel like you should look like that" (heterosexual man, age 26). To challenge body-related ideals, participants suggested that young people should be provided with the opportunity to see illustrations of a greater variety of genitalia and to provide context for young people on the differences that exist between their lives and the lives of pornography performers:

Show [that pornography performers] need to spend like four hours in the gym and have like egg whites and kale. And that's just their life and just to give it a context like.... That's their job, but if you're in school or in another job.... I'm not going to be in the gym from eight [a.m.] till two in the afternoon. (Heterosexual woman, age 24)

The Realities of Sex. Many participants discussed how pornography depicted an unrealistic representation of real-life sex by making sex look easy. Participants reported that it was important to inform young people about realistic sexual expectations, including the awkward, funny, and disappointing moments that people are likely to experience in their sexual lives: "Something as simple as putting on a condom ... there can be a bit of fumbling in the real world, and like in porn the guy mightn't be wearing a condom" (heterosexual woman, age 22). Online interventions using video campaigns that incorporate the use of humor were recommended to help youth to establish realistic expectations for sex:

A campaign with a Web site which is tailored towards young people... Even one-minute videos, like, "hashtag real porn." And if it's somebody getting a leg cramp in the middle of something, this is the reality of what it's like... If you did it in a funny way, make it more accessible, and people would actually watch it. (Heterosexual woman, age 25)

Pleasure and Orgasm. Discussions comparing "realworld sex" and "porn sex" often centered on genital functioning. Some participants believed that representations of sexual pleasure and orgasm were portrayed as dramatic and overt, with ease of orgasm, ejaculation, and "squirting" or female ejaculation being cited as some of the most unrealistic aspects of genital functioning in pornography (e.g., "orgasm through penetration, that seems to happen a lot in porn and that's not the reality"; heterosexual woman, age 26). Many male participants acknowledged the unrealistic nature of on-screen sex yet discussed personal accounts of how pornography created a standard for sex and failing to achieve such outcomes reflected poorly on their sense of self. As one hetersexual man, age 24, noted: "I think for guys it [is] a lot more deep rooted in their psychology and how they think about sex and how that reflects on themselves... . If something doesn't go the way they pictured it ... that's it. It's game over, you know."

Others believed some bodily functions which feature extensively in pornography but which are less common in reality, such as vaginal ejaculation or "squirting," can positively reinforce such bodily functions for those who experience them or show the potential of the human body:

In porn you see things you don't normally see in real life. Like it's good to watch porn and think like, "Well, actually a human body can do that!" To see like different things. Probably if you don't watch porn, you will never see a squirt. So yeah, for people who do squirt, then that's really positive, like, okay they can happen sometimes. (Heterosexual man, age 24)

"Mythbusting" activities and videos on social media platforms were recommended to challenge perceptions of idealized genital functioning:

You could present like myth and fact, and like short YouTube videos or a Snapchat that you could follow. And be like "myth" about penis size, or something like that, and then "fact": "most penises are this size," or most sexual interactions will last this long on average. (Heterosexual woman, 29)

Physical Safety and Sex. Contrasting views on safety emerged during discussions. On one hand, pornography provides a safe space for individuals to express and explore their sexuality ("That, you know, it's a safe enough place to explore your fantasies or, you know, your sexual orientation or your interests, whatever"; heterosexual woman, age 25). On the other hand, the greatest concern regarding safe sex was related to physical pain or injury. Participants discussed how pornography often portrayed pain as pleasurable and that youth should be informed about the real-life implications of such behaviors so that they can make informed decisions about what they become involved in: "If you watch those videos, you never see the actual damage to the person like you do in real life. There's a lot more that goes into it than smacking someone around" (heterosexual man, age 24).

Many believed that certain pornographic videos glamorized physical pain in sex, which in turn could prompt youth who learn about sex through pornography to put themselves in danger by practicing unsafe sex or risky behaviors. Participants believed that youth could be supported to understand the capacity of the human body if relevant information about anatomy and physiology, reproductive organs, and sexual response were provided:

Anatomy is important. You've got to be relaxed for it not to be uncomfortable or painful or, you know, in terms of lubrication, but ... it's also psychological. So, free of judgments, just the facts, that for some people they may need more foreplay or whatever to be physically ready to engage in penetration or something like that. (Heterosexual woman, age 29) **Porn as Education.** Many LGBT+ participants reported that they used pornography as a source of education, with many arguing it was the only source of information that helped them identify their sexual orientation:

For a lot of gay people, anyway, it's used very much as a common tool for people to, um, to figure out their sexual orientation, because at that age it is confusing. So I suppose porn is a go-to medium for people to find out what they're reacting to sexually, I suppose. (Homosexual man, age 24)

Many discussed how they consulted pornography for information because their formal sex education was lacking. Homosexual participants discussed how this was particularly the case for LGBT+ youth but that it did not always provide them with factual information:

It makes it this idealized concept for homosexual males. They make anal look so easy [group laughter]....And it isn't easy [group laughter].... Particularly if you're LGBT, you don't see representation of how you would have sex in school, from books, media ... so I think LGBT people at a younger age use it to learn how they should function. (Homosexual man, age 19)

Most participants believed that porn literacy education should commence at the beginning of puberty, but some believed that it should coincide with when children or adolescents first gain Internet access. Regardless of the age, all participants agreed that the content should be age and stage appropriate: "I'd say about the same time as sex ed, so like ten, eleven. Not going right into the nitty-gritty or gory details but just starting that conversation" (heterosexual man, age 24). Early education was believed to be central to supporting youth to understand and negotiate their sexual realities and also in avoiding the acquisition of negative sexual scripts that could be applied later in life. One woman commented that early education, particularly for young women, would provide greater power to people to make healthy choices for themselves:

Sex and self-worth for younger girls and this pressure to perform ... you don't just need to do what is being asked of you. You can have your own voice. But that kind of comes with age. I don't know how you begin to do that from younger, unless you start the conversation earlier. (Heterosexual woman, age 27)

Critical Thinking. Many believed that porn literacy education was important so that youth have the knowledge and confidence to make decisions about their sex lives that reflect their own needs and not that of perceived norms: "They [young women] need to be educated that your self-worth isn't linked with your sexual performances or what you do with a guy; you're better off to stay true to yourself" (heterosexual woman, age 27). Participants argued that because pornography is ubiquitous and access to it is impossible to fully control, promoting critical thinking

within porn education would encourage youth to ask questions about the pornographic content that they see.

I think, again, the issue isn't so much that we should change porn as how much that we should teach people to think critically ... because porn is an industry. They're going to keep doing what they're doing to get sales. There's no way we can really change that problem. (Queer transgender man, age 22)

Sexualization and Fetishizing of LGBT+ Groups. During the group discussions, LGBT+ participants expressed concern over the inequality and underrepresentation of certain sexual orientation groups. Some LGBT+ participants believed that the portrayal of transgender people in pornography reinforced negative stereotypes, ridiculed transgender communities, and, rather than promoting awareness of sexual diversity, could contribute to transgender-based violence and stigma. One heterosexual man believed that pornography helped to increase trans visibility: "Categories you see in porn have gotten better over the years. They're including a lot more variety, so there is a lot more representation for trans or queer; gay has expanded a lot" (heterosexual man, age 26). Some LGBT+ participants felt that the representation of lesbian women catered to the enjoyment of heterosexual men and, by doing so, failed to represent the realities of same-sex relationships, in that their relationships were simply portrayed as a source of entertainment for consumption by others:

Heterosexual porn is produced for heterosexual men, and you'd think lesbian porn would be produced for lesbian women. But it is still produced for heterosexual men, and it just goes to show that women have like no ... it's for consumption, their sexuality. It's for like performance, it's for like someone else, other than them. (Homosexual nonbinary, 19)

LGBT+ participants believed that to tackle negative stereotypes portrayed in pornography, youth need to be encouraged to explore and understand the origins of stereotypes and the potential implications for transgender people: "You have to understand why it's wrong... . So really exploring that stereotype and where it's from, as opposed to just don't watch it because it's wrong ... because that's not really going to change anyone's opinion" (Queer trans man, age 22).

Discussion

Our findings suggest that objectives for porn literacy interventions should center on reducing shame regarding pornography engagement and improving critical thinking skills related to the following sexual health topics: increasing acceptance of and reducing stigma around pornography; sexual consent and communication; body image comparisons; the realities of sex in the real world; sexual pleasure and orgasm; physical safety; sexual and genderbased violence; the role of pornography as an educator; and the sexualizing and fetishizing of gay and transgender communities. Some have suggested that some youth may not be equipped with the skills to distinguish between the portrayal of sexual relationships in pornography and those in real life (Peter & Valkenburg, 2016; Wright, Tokunaga, & Kraus, 2016). Porn literacy education aims to facilitate youth in thinking critically about the content they see. Therefore, supported by theoretical models, such as the acquisition, activation, and application model (3AM; Wright, 2011), effective porn literacy education may potentially reduce the perceived realism of sexual portrayals in pornography by undermining beliefs regarding the plausibility of certain pornography-based messages and by highlighting the scripted and dramatized nature of sex in pornography. Challenging such messages may also confront youth perceptions of sexual norms and facilitate the development of personalized sexual scripts.

Previous studies have suggested that young people should be informed about risks related to pornography engagement (Baker, 2016); however, Spišák (2016) discussed how portraying pornography solely as a risk behavior may negatively influence people's perceptions regarding their own use, increasing shame and embarrassment about engagement, sexual exploration, and masturbation. It is important, therefore, to resist using any intervention to reinforce the perspective that pornography engagement is shameful and to thereby restrict open sexual health communication. It is also important when considering the development of interventions for media commonly used by youth to acknowledge that criticizing such media may produce undesired outcomes (Banerjee & Kubey, 2013). Condemning media like pornography may be unnecessary, as having affinity for pornography is not incongruent with having a critical evaluation of it at the same time (Austin et al., 2015). In addition, taking an educational perspective on "risk" could incorporate the aim of replacing individual perspectives with other, "approved" perspectives, which would imperil the acquisition of skills that help young people become critical thinkers and effective communicators with the ability to express their own beliefs (Alliance for Media Literate America, 2007).

This study set out to explore the development of a model of porn literacy underpinned by critical thinking. The adoption of a participatory mode of working with youth demonstrated that this approach could be acceptable and match their own values. The findings also provide a basis for youth-derived content for porn literacy to examine further with adolescents. The findings show that a media literacy approach can be adapted to pornography and can provide a rationale, key components, and approaches for future research. These findings also support an approach that facilitates the development of critical thinking skills and provides youth with information so that they can explore a variety of sexual health–related topics beginning at a young age. Findings indicate that certain elements of porn literacy are gendered. The manner in which men discussed pornography and its effects indicated that they believed women and men experience pornography in the same way and are likely to have similar effects from it as a result. Men were critical of pornography, but less so than women. Yet there are gender differences in how media portray men and women (Hust, Brown, & L'Engle, 2008). Boys have been found to believe that general media messages are more desirable than girls (Austin et al., 2015); this may be as a result of how men are portrayed. Pornography often portrays men as dominant and women as submissive, prioritizing male sexual pleasure and orgasm. As a result, most pornography may be more desirable to men as it highlights their perspective and prioritizes their pleasure.

Overall, women in this study were more critical of pornography than men, were more likely to refer to the sexual inequalities portrayed in pornography, and more often expressed how women are indirectly affected by pornography as a result of men's use. These findings suggest that men may not be aware of the potential indirect effect of their own consumption on their female partners. Young women may enact pornography-based scripts to impress their partners and may believe that a failure to replicate such scripts could reflect poorly on themselves. There was comparatively little discussion of the direct effect of their own engagement on their personal beliefs. The nature of some participant responses drew on their own experiences of pornography, while most spoke about pornography more generally. The sensitive nature of this research may result in the problem of social desirability of responses (Catania, Gibson, Marin, Coates, & Greenblatt, 1990). The presence of others in focus groups has been argued to pressure participants into presenting alternative views that they believe may be considered more socially acceptable yet may contradict their true experiences or beliefs (Frith, 2000). The information provided by participants who refer to pornography use more generally may be influenced by the type of information that they have received about pornography, either from peers, the media, or their family members. In such instances it can be difficult to determine whether the information they report reflects their own experiences. This as an important consideration for future research. Future studies should investigate where young people get information about pornography and whether this influences the way they discuss it in group situations.

These findings are important for intervention development. Porn literacy education may differ by gender in offering more support to girls for resisting indirect pressure and to boys for resisting direct pressure. It is also important to consider how women in this study constructed the use of pornography as a source of pleasure. Other studies have reported many positive uses of pornography (Smith et al., 2015), and women in this study may have felt the need to talk about pornography in a negative way. This suggests that women may need to be encouraged to a greater extent to feel unashamed or more comfortable discussing pornography.

Our findings on LGBT+ youth are somewhat inconsistent with existing literature. Previous research suggests that many gay men value pornography for sexual exploration (Arrington-

Sanders et al., 2015). Our LGBT+ participants often used pornography to explore their sexual identities, but some also believed that pornography reinforced negative stereotypes about transgender people and contributed to the hypersexualization of gay couples. Moreover, rather than normalizing bisexual or same-sex relationships, some participants suggested that pornography further stigmatizes them by fetishizing their sexuality. Such messages may be particularly damaging for young people who are struggling with their sexual identity or coming out and may mislead youth regarding the perceptions of LGBT+ people in society or what is expected in same-sex relationships. Of particular concern is that although many damaging portrayals of LGBT+ persons were highlighted, LGBT+ participants often described how pornography had been important to their own exploration and understanding of their sexuality. These findings are reflective of other studies (Arrington-Sanders et al., 2015) and may be due to the lack of information about LGBT+ sexual practices and relationships in formal sex education. As youth may be more likely to receive general sexual health education at a young age, it is crucial that sex educators ensure that a heteronormative discourse does not dominate educational interventions.

Many of the recommended approaches to engaging youth in porn literacy education, such as facilitated group discussions, were consistent with strategies employed in existing media literacy initiatives. A variety of teaching methods could be employed within a porn literacy intervention, including the utilization of factual information about anatomy, group work discussions to explore gender representations and stereotypes, and the use of activities or video content on digital and social media platforms. This is consistent with principles of media literacy education that suggest use of a variety of learning styles (Alliance for Media Literate America, 2007). Providing factual information about anatomy and sexual functioning, for instance, supports youth in using well-reasoned evidence in establishing their opinions and beliefs (Alliance for Media Literate America, 2007). Teaching youth to question the representation of people or communities in pornography can help to foster a more sophisticated understanding of media and the implications of engagement.

One of the greatest barriers to successful sex education implementation is that many programs are provided in schools that restrict the delivery of certain content. Digital media can provide important prospects for the development of sexuality education by facilitating greater reach at lower costs (Bull, Levine, Black, Schmiege, & Santelli, 2012) and might be particularly effective at engaging youth around sensitive topics because of the anonymity that it provides. However, digital content may work best in conjunction with group discussions, as group discussions can help students understand different perspectives and potentially reduce the influence of perceived norms on sexual decision making.

Participants believed that, to challenge media messages and acquisition of potentially negative sexual scripts, reducing shame associated with pornography engagement was just as important as talking about the potential risks. This would aid in

the development of critical thinking skills and help youth come to their own consensus on their beliefs about pornography. Such education should begin at an age where young people are likely to be engaging with pornography for the first time (Sinković et al., 2013). Our findings suggest that porn literacy interventions could take a staged approach, with the first level of engagement using age-appropriate content with young adolescents, which could then be developed further for older adolescents. Adolescence is an important stage for sexual development, where sexual socialization is at its strongest. This stage of life is important to the acquisition of knowledge and beliefs regarding sex that may last into adulthood. If we are to effectively equip youth with the knowledge and skills to challenge media messages, educational efforts need to begin before pornographyacquired sexual scripts are likely to be applied in their own relationships.

Conflicting beliefs about the core concepts proposed in this study demonstrate that differing constructions can be applied to the same aspects of pornography (Bridges, Wosnitzer, Scharrer, Sun, & Liberman, 2010; Brown & L'Engle, 2009; Klaassen & Peter, 2015). Although the beliefs expressed by participants in this study may not cover the breadth of differing beliefs that exist about pornography in general society, the findings may help intervention developers preempt topics of conversation that may arise within porn literacy interventions and also design content that helps youth critique commonly held viewpoints.

Strengths and Limitations

To the best of the authors' knowledge this is the first study to provide a youth-centered, evidence-based approach to the development of porn literacy interventions. Another strength of this study includes the relatively large and diverse sample. This study also had several limitations. First, our sample was a convenience sample of university students and LGBT+ young people who actively engaged with an LGBT+ resource center. Given that the study was qualitative and participation was voluntary, the findings cannot be generalized. The study was conducted in Ireland, a country with a conservative sexual history. Findings may not be reflective of youth in more liberal countries. Second, we rationalized that by engaging with young adults for this study we might acquire an appropriate and relevant set of recommendations for porn literacy education for adolescents. Young adults can provide insight into the differences between pornography and real-world sexual relationships, an area in which adolescents are likely to have less experience. However, this is no guarantee that the suggestions made will be reflective of the porn literacy educational needs of adolescents. This will need to be explored in future studies. Third, because of the underrepresentation of lesbian women, perspectives from the LGBT+ cohort are predominantly from gay men and nonbinary participants. Lesbian women may have differing perspectives. Fourth, researcher subjectivity or bias can be introduced during qualitative data analysis. We believe that the participatory component of the research mitigated against this occurring during the development of the core concepts for porn literacy, as the participants themselves produced, analyzed, and presented their own data.

However, data were then explored in greater detail during the group interviews, and researcher subjectivity may have been introduced during the interpretation of the data.

Although it was not highlighted in our findings, it is also important that young people are made aware of the laws around pornography and how they might affect them. Finally, the number of sessions and components, as well as the sequencing of topics, will impact upon how well the content is absorbed by the learner (Ritter, Nerb, Lehtinen, & O'Shea, 2007). Media literacy interventions which have fewer components and which take place over a greater number of sessions have been shown to be more effective (Jeong et al., 2012). Interventions with many topics may be cognitively demanding for young children; therefore, porn literacy interventions for younger age groups may be more effective by covering fewer topics. Finally, topic sequencing was not explored, nor did it emerge in this research. Future studies should test whether topical or spiral sequencing (Ritter et al., 2007) is best suited to skill and knowledge acquisition and student engagement.

Implications and Recommendations

A variety of engagement strategies were highlighted by participants that aligns with strategies utilized in media literacy interventions. Sex educators should endeavor to develop materials and activities that engage youth in these ways, and researchers should evaluate the effectiveness of such techniques, piloting interventions and evaluating interventions with younger and older youth who engage in porn literacy interventions based on this approach. Studies with longitudinal experimental designs should test the effectiveness of this model with youth.

The current study has demonstrated that eliminating stigma is central to porn literacy. This finding suggests that participants believe some types of pornography are acceptable and others are not. Participants acknowledged that pornography is here to stay and, rather than trying to fight against it, youth should have the opportunity to discuss its content and acquire tools to navigate their sexuality. It is important for sex educators to consider the potential implications of possibly legitimizing pornography for vouth through such discussions. In addition, young men are likely to have first engaged with pornography at a younger age than adolescent women (Sinković et al., 2013). Group discussions involving individuals with differing levels of experience with pornography may result in less experienced youth becoming inadvertently aware of pornography, which may encourage youth to access such content. This remains an important consideration for porn literacy, particularly when working with mixed-gender groups of young adolescents.

Conclusion

The use of the youth-derived approaches described here may help youth develop critical thinking skills to challenge sexual media messages, expect realistic outcomes from their first sexual experiences, and develop the capacity to have fulfilling and satisfying sexual relationships. This contribution needs to extend beyond the research process to develop youth-based programs. This information is important to researchers, intervention developers, and policymakers. Only when we know how best to engage youth can we develop effective porn literacy interventions. These findings provide a promising starting point for sex educators to develop content that meets the needs of young people. Future research should test the effectiveness of this model with younger and older adolescents. Only by investigating the differences between such groups will we be able to develop program content that is engaging, age appropriate, and effective.

References

- Albury, K. (2014). Porn and sex education, porn as sex education. Porn Studies, 1, 172–181. doi:10.1080/23268743.2013.863654
- Alliance for Media Literate America (AMLA). (2007). Core principles of media literacy education. Retrieved October 27, 2017, from https://mediaeduca tionlab.com/sites/default/files/AMLA-Core-Princ-MLE_0.pdf
- Arrington-Sanders, R., Harper, G. W., Morgan, A., Ogunbajo, A., Trent, M., & Fortenberry, J. D. (2015). The role of sexually explicit material in the sexual development of same-sex-attracted black adolescent males. *Archives of Sexual Behavior*, 44, 597–608. doi:10.1007/s10508-014-0416-x
- Aufderheide, P. (Ed.). (1993). Media literacy: A report of the national leadership conference on media literacy. Aspen, CO: Aspen Institute.
- Austin, E. W., Pinkleton, B. E., Chen, Y. C., & Austin, B. W. (2015). Processing of sexual media messages improves due to media literacy effects on perceived message desirability. *Mass Communication and Society*, 18, 399–421. doi:10.1080/15205436.2014.1001909
- Austin, E. W., Pinkleton, B. E., & Funabiki, R. P. (2007). The desirability paradox in the effects of media literacy training. *Communication Research*, 34, 483–506. doi:10.1177/0093650207305233
- Austin, E. W., Pinkleton, B. E., & Johnson, J. Q. (2006). Benefits and costs of Channel One in a middle school setting and the role of media-literacy training. *Pediatrics*, 117, e423–e433. doi:10.1542/peds.2005-0953
- 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, 213–228. doi:10.1080/ 14681811.2015.1090968
- Banerjee, S. C., & Kubey, R. (2013). Boom or boomerang: A critical review of evidence documenting media literacy efficacy. *Media Effects/Media Psychology*, 699–722. doi:10.1002/9781444361506.wbiems994
- Bertrand, J. T., Brown, J. E., & Ward, V. M. (1992). Techniques for analyzing focus group data. *Evaluation Review*, 16, 198–209. doi:10.1177/0193841X9201600206
- Bishtraining. (2017). Porn. Retrieved January 21, 2018, from http://www.bishuk.com/porn/
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3, 77–101. doi:10.1191/ 1478088706qp063oa
- Bridges, A. J., Wosnitzer, R., Scharrer, E., Sun, C., & Liberman, R. (2010). Aggression and sexual behavior in best-selling pornography videos: A content analysis update. *Violence against Women*, 16, 1065–1085. doi:10.1177/1077801210382866
- Brown, J. D., & L'Engle, K. L. (2009). X-Rated: Sexual attitudes and behaviors associated with U.S. early adolescents' exposure to sexually explicit media. *Communication Research*, 36, 129–151. doi:10.1177/ 0093650208326465
- Buckingham, D. (2008). Media education: Literacy, learning and contemporary culture. Cambridge, UK: Polity.
- Bull, S. S., Levine, D. K., Black, S. R., Schmiege, S. J., & Santelli, J. (2012). Social media–delivered sexual health intervention: A cluster randomized controlled trial. *American Journal of Preventive Medicine*, 43, 467–474. doi:10.1016/j.amepre.2012.07.022

- Burbach, M. E., Matkin, G. S., & Fritz, S. M. (2004). Teaching critical thinking in an introductory leadership course utilizing active learning strategies: A confirmatory study. *College Student Journal*, 38, 482–493.
- Catania, J. A., Gibson, D. R., Marin, B., Coates, T. J., & Greenblatt, R. M. (1990). Response bias in assessing sexual behaviors relevant to HIV transmission. *Evaluation and Program Planning*, 13, 19–29. doi:10.1016/0149-7189(90)90005-h
- Coll, L., O'Sullivan, M., & Enright, E. (2017). 'The trouble with normal': (Re) imagining sexuality education with young people. *Sex Education*, 1–15. doi:10.1080/14681811.2017.1410699
- Crabbe, M., & Corlett, D. (2011). Eroticising inequality: Technology, pornography and young people. *Redress*, 20, 11.
- Davis, A., Carrotte, E., Hellard, M., Temple-Smith, M., & Lim, M. (2017). Pornography as a source of education about sex and sexuality among a sample of 15–29 year old Australians. *The Journal of Sexual Medicine*, 14, e272. doi:10.1016/j.jsxm.2017.04.685
- Dawson, K., Cooper, C., & Moore, J. (2018). 'They giggle and I crush over them': Porn as pedagogy at Tate Modern. *Porn Studies*, 5, 1–6. doi:10.1080/23268743.2017.1388190
- DeFur. (2014). Porn, porn everywhere! A values clarification lesson for young adults. Retrieved from http://www.sexedstore.com/porn-porneverywhere-a-values-clarification-lesson-for-young-adults-ages-18/
- Dwyer, C. P., Hogan, M. J., & Stewart, I. (2014). An integrated critical thinking framework for the 21st century. *Thinking Skills and Creativity*, 12, 43–52. doi:10.1016/j.tsc.2013.12.004
- Eglington, K. (2008). Using participatory visual ethnography to explore young people's use of visual material culture in place and space. In R. Hickman (Ed.), *Research in art and design education* (pp. 51–65). Bristol, UK: Intellect.
- Elias, M. J., Gara, M. A., Schuyler, T. F., Branden-Muller, L. R., & Sayette, M. A. (1991). The promotion of social competence: Longitudinal study of a preventive school-based program. *American Journal of Orthopsychiatry*, 61, 409–417. doi:10.1037/h0079277
- Fazey, I. (2010). Resilience and higher order thinking. *Ecology and Society*, 15, 1–22. doi:10.5751/ES-03434-150309
- Fern, E. F. (1982). The use of focus groups for idea generation: The effects of group size, acquaintanceship, and moderator on response quantity and quality. *Journal of Marketing Research*, 1–13. doi:10.5751/es-03434-150309
- Frith, H. (2000). Focusing on sex: Using focus groups in sex research. Sexualities, 3, 275–297. doi:10.1177/136346000003003001
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20, 1408.
- Guse, K., Levine, D., Martins, S., Lira, A., Gaarde, J., Westmorland, W., & Gilliam, M. (2012). Interventions using new digital media to improve adolescent sexual health: A systematic review. *Journal of Adolescent Health*, 51, 535–543. doi:10.1016/j.jadohealth.2012.03.014
- Hald, G. M., & Malamuth, N. M. (2008). Self-perceived effects of pornography consumption. Archives of Sexual Behavior, 37, 614–625. doi:10.1007/s10508-007-9212-1
- Hald, G. M., & Mulya, T. W. (2013). Pornography consumption and non-marital sexual behaviour in a sample of young Indonesian university students. *Culture, Health & Sexuality*, 15, 981–996. doi:10.1080/13691058. 2013.802013
- Harper, C., & Hodgins, D. C. (2016). Examining correlates of problematic internet pornography use among university students. *Journal of Beha*vioral Addictions, 5, 179–191. doi:10.1556/2006.5.2016.022
- Hébert, A., & Weaver, A. (2015). Perks, problems, and the people who play: A qualitative exploration of dominant and submissive BDSM roles. *The Canadian Journal of Human Sexuality*, 24, 49–62. doi:10.3138/cjhs.2467
- Hust, S. J. T., Brown, J. D., & L'Engle, K. L. (2008). Boys will be boys and girls better be prepared: An analysis of the rare sexual health messages in young adolescents' media. *Mass Communication and Society*, 11, 3–23. doi:10.1080/15205430701668139
- Hutchings, N. (2017). Porn literacy: Raising sexually intelligent young people. *The Journal of Sexual Medicine*, 14, e292. doi:10.1016/j. jsxm.2017.04.405

- Jeong, S. H., Cho, H., & Hwang, Y. (2012). Media literacy interventions: A meta-analytic review. *Journal of Communication*, 62, 454–472. doi:10.1111/j.1460-2466.2012.01643.x
- Kitzinger, J. (1995). Qualitative research. Introducing focus groups. British Medical Journal, 311, 299. doi:10.1136/bmj.311.7000.299
- Klaassen, M. J., & Peter, J. (2015). Gender (in) equality in Internet pornography: A content analysis of popular pornographic Internet videos. *Journal* of Sex Research, 52, 721–735. doi:10.1080/00224499.2014.976781
- KN Creative Lab. (2013, August). Porn sex vs real sex, the differences explained with food. Retrieved from https://www.adsoftheworld.com/ media/digital/korhaberbrown_porn_sex_vs_real_sex_the_differences_ explained_with_food
- Kohut, T., Baer, J. L., & Watts, B. (2016). Is pornography really about "making hate to women"? Pornography users hold more gender egalitarian attitudes than nonusers in a representative American sample. *Journal* of Sex Research, 53, 1–11. doi:10.1080/00224499.2015.1023427
- Koltay, T. (2011). The media and the literacies: Media literacy, information literacy, digital literacy. *Media, Culture & Society*, 33, 211–221. doi:10.1177/0163443710393382
- Lim, M. S., Agius, P. A., Carrotte, E. R., Vella, A. M., & Hellard, M. E. (2017). Young Australians' use of pornography and associations with sexual risk behaviours. *Australian and New Zealand Journal of Public Health*, 41, 438–443. doi:10.1111/1753-6405.12678
- Livingstone, S. (2004). Media literacy and the challenge of new information and communication technologies. *The Communication Review*, 7, 3–14. doi:10.1080/10714420490280152
- Livingstone, S., Papaioannou, T., Pérez, M. D. M. G., & Wijnen, C. W. (2017). Critical insights in European media literacy research and policy. *Medijske Studije*, 3, 1–11.
- Löfgren-Mårtenson, L., & Månsson, S. A. (2010). Lust, love, and life: A qualitative study of Swedish adolescents' perceptions and experiences with pornography. *Journal of Sex Research*, 47, 568–579. doi:10.1080/00224490903151374
- Löfgren-Mårtenson, L., & Månsson, S. A. (2010). Lust, love, and life: A qualitative study of swedish adolescents' perceptions and experiences with pornography. *Journal Of Sex Research*, 47, 568–579. doi:10.1080/00224490903151374
- Marsch, L. A., Grabinski, M. J., Bickel, W. K., Desrosiers, A., Guarino, H., Muehlbach, B., ... Acosta, M. (2011). Computer-assisted HIV prevention for youth with substance use disorders. *Substance Use & Misuse*, 46, 46–56. doi:10.3109/10826084.2011.521088
- McKee, A., Albury, K., Dunne, M., Grieshaber, S., Hartley, J., Lumby, C., & Mathews, B. (2010). Healthy sexual development: A multidisciplinary framework for research. *International Journal of Sexual Health*, 22, 14–19. doi:10.1080/19317610903393043
- McKenna, K. Y. A., Green, A. S., & Smith, P. K. (2001). Demarginalizing the sexual self. *Journal of Sex Research*, 38, 302–311. doi:10.1080/ 00224490109552101
- Miller, D. J., Hald, G. M., & Kidd, G. (2017). Self-perceived effects of pornography consumption among heterosexual men. *Psychology of Men & Masculinity*. doi:10.1037/men0000112
- Moshki, M., Hassanzade, T., & Taymoori, P. (2014). Effect of life skills training on drug abuse preventive behaviors among university students. *International Journal of Preventive Medicine*, 5, 577.
- O'Higgins, S., & Gabhainn, S. N. (2010). Youth participation in setting the agenda: Learning outcomes for sex education in Ireland. *Sex Education*, 10, 387–403. doi:10.1080/14681811.2010.515096
- Owen, E., & Gowen, L. K. (2014). A guide to teaching about sexually explicit content online: The basics. Retrieved from https://www. connectsafely.org/wp-content/uploads/Sexually-explicit-content-.pdf

- Paxton, S. J., McLean, S. A., Gollings, E. K., Faulkner, C., & Wertheim, E. H. (2007). Comparison of face-to-face and internet interventions for body image and eating problems in adult women: An RCT. *International Journal of Eating Disorders*, 40, 692–704. doi:10.1002/eat.20446
- Peter, J., & Valkenburg, P. M. (2016). Adolescents and pornography: A review of 20 years of research. *Journal of Sex Research*, 53, 509–531. doi:10.1080/00224499.2016.1143441
- Pinkleton, B. E., Austin, E. W., Chen, Y. C. Y., & Cohen, M. (2012). The role of media literacy in shaping adolescents' understanding of and responses to sexual portrayals in mass media. *Journal of Health Communication*, 17, 460–476. doi:10.1080/10810730.2011.635770
- QSR International Pty Ltd. (2012). NVivo qualitative data analysis software. (Version 10). Victoria, Australia. doi:10.5688/ajpe78125
- Rissel, C., Richters, J., de Visser, R. O., McKee, A., Yeung, A., & Caruana, T. (2017). A profile of pornography users in Australia: Findings from the second Australian study of health and relationships. *Journal of Sex Research*, 54, 227–240. doi:10.1080/00224499.2016.1191597
- Ritter, F. E., Nerb, J., Lehtinen, E., & O'Shea, T. M. (Eds.). (2007). In order to learn: How the sequence of topics influences learning. New York, NY: Oxford University Press. doi:10.1093/acprof:oso/ 9780195178845.001.0001
- Rothman, E. F., Adhia, A., Christensen, T. T., Paruk, J., Alder, J., & Daley, N. (2018). A pornography literacy class for youth: Results of a feasibility and efficacy pilot study. *American Journal of Sexuality Education*, 1–17. doi:10.1080/15546128.2018.1437100
- RutlandCentre. (2018). Sex and pornography: Pornography addiction. Retrieved from https://www.rutlandcentre.ie/addictions-we-treat/sexaddiction-porn-addiction
- Scull, T. M., Kupersmidt, J. B., Malik, C. V., & Keefe, E. M. (2018). Examining the efficacy of an mHealth media literacy education program for sexual health promotion in older adolescents attending community college. *Journal of American College Health*, 66, 165–177. doi:10.1080/07448481.2017.1393822
- Short, M. B., Black, L., Smith, A. H., Wetterneck, C. T., & Wells, D. E. (2012). A review of Internet pornography use research: Methodology and content from the past 10 years. *Cyberpsychology, Behavior*, and Social Networking, 15, 13–23. doi:10.1089/cyber.2010.0477
- Sinković, M., Štulhofer, A., & Božić, J. (2013). Revisiting the association between pornography use and risky sexual behaviors: The role of early exposure to pornography and sexual sensation seeking. *Journal of Sex Research*, 50, 633–641. doi:10.1080/ 00224499.2012.681403
- Smith, C., Attwood, F., & Barker, M. (2015). Why do people watch porn. In L. Comella & S. Tarrant (Eds.), *New views on pornography* (pp. 267–286). Santa Barbara, CA: Praeger.
- Spišák, S. (2016). 'Everywhere they say that it's harmful but they don't say how, so I'm asking here': Young people, pornography and negotiations with notions of risk and harm. *Sex Education*, 16, 130–142. doi:10.1080/14681811.2015.1080158
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research (2nd ed.). Newbury Park, CA: Sage.
- Szmigin, I., Griffin, C., Mistral, W., Bengry-Howell, A., Weale, L., & Hackley, C. (2008). Re-framing 'binge drinking' as calculated hedonism: Empirical evidence from the UK. *International Journal* of Drug Policy, 19(5), 359–366. doi:10.1016/j.drugpo.2007.08.009
- Tortolero, S. R., Markham, C. M., Peskin, M. F., Shegog, R., Addy, R. C., Escobar-Chaves, S. L., & Baumler, E. R. (2010). It's your game: Keep it real: Delaying sexual behavior with an effective middle school program.

Journal of Adolescent Health, 46, 169–179. doi:10.1016/j. jadohealth.2009.06.008

- Vahedi, Z., Sibalis, A., & Sutherland, J. E. (2018). Are media literacy interventions effective at changing attitudes and intentions towards risky health behaviors in adolescents? A meta-analytic review. *Journal* of Adolescence, 67, 140–152. doi:10.1016/j.adolescence.2018.06.007
- Vandenbosch, L., & van Oosten, J. M. (2017). The relationship between online pornography and the sexual objectification of women: The attenuating role of porn literacy education. *Journal of Communication*, 67, 1015–1036. doi:10.1111/jcom.12341
- World Health Organization. (2006). Sexual and reproductive health. *Defining sexual health*. Retrieved from https://www.who.int/repro ductivehealth/topics/sexual_health/sh_definitions/en/
- Wright, P. J. (2011). Mass media effects on youth sexual behavior assessing the claim for causality. *Annals of the International Communication Association*, 35, 343–385. doi:10.1080/23808985.2011.11679121
- Wright, P. J., & Bae, S. (2015). US adults' pornography consumption and attitudes toward adolescents' access to birth control: A national panel study. *International Journal of Sexual Health*, 27, 69–82. doi:10.1080/19317611.2014.944294
- Wright, P. J., Tokunaga, R. S., & Kraus, A. (2016). Consumption of pornography, perceived peer norms, and condomless sex. *Health Communication*, 31, 954–963. doi:10.1080/10410236.2015.1022936
- Ybarra, M. L., & Mitchell, K. J. (2005). Exposure to internet pornography among children and adolescents: A national survey. *Cyberpsychology* & *Behavior*, 8, 473–486. doi:10.1089/cpb.2005.8.473