A protocol for a systematic review of research pertaining to young people's views on how pornography exposure or use influences their sexual development, attitudes or behaviors

Amy Peterson, Gillian Silver, Stephanie Guinosso, Heather Bell, Karin Coyle

Background

Ease of access to the Internet through computers and mobile devices has increased adolescent exposure (intentional or inadvertent) to online pornography. For instance, one study of college students indicated that 93% of males and 62% of females had viewed pornography prior to age 18 (Sabina et al., 2008).

The use and impact of pornography among young people is difficult to research because its use is illegal for minors in most countries. Therefore, research has not arrived at consistent conclusions about its influence on adolescent sexual development, attitudes or behavior. A few longitudinal studies in the U.S. and internationally have addressed different aspects of adolescent pornography use. One such study of U.S. middle school students found that boys who had viewed pornography were more likely to have permissive sexual attitudes and perpetrate sexual harassment; girls in this study reported less progressive gender-role attitudes (Brown & L'Engle, 2009). However, a Dutch longitudinal study that compared adolescent and adult pornography use and sexual behaviors found no association between pornography use and unprotected sex among adolescents (Peter & Valkenburg, 2011). Cross-sectional studies suggest there may be a relationship between pornography and sexual risk behavior; for example, one cross-sectional study of Swiss adolescents found that males who viewed pornography were less likely to report condom use at last intercourse (Luder et al., 2011). However, cross-sectional research cannot establish whether pornography use occurs prior to changes in attitudes and behaviors, or if they occur simultaneously. More research is needed to understand if or how sexually explicit material influences sexual behavior and attitudes, and specifically within the cultural context of the U.S.

Understanding motivations for viewing pornography from mixed method studies can lead to insight into directions for further research and translation to health education. Adolescents often seek pornography for sexual information (Arrington-Sanders et al., 2015; Rothman et al. 2015) and sexual arousal (Peter & Valkenburg, 2016; Lofgren-Martenson & Mansson 2010). However, it may also affect how adolescents view or understand sexual behavior. For example, several American girls in one qualitative study reported attempting sexual acts depicted in pornography (e.g. anal sex), which led to unexpected, negative effects such as pain and discomfort (Rothman et al., 2015). In some cases, pornography may be used to learn about sex when other sources are not available to them. For example, because sex education in their schools did not give LGBTQ-inclusive information about sex, some same-sex attracted males viewed pornography to learn about sexual behavior engaged in by men who have sex with men (Arrington-Sanders et al., 2015). Adolescents have also demonstrated critical

engagement with the pornography they view. Female adolescents in a Dutch study expressed negative views of women's roles in pornography and its portrayal of unrealistic physical ideals (Lofgren-Martenson & Mansson, 2010) while adolescent girls in a U.S. qualitative study expressed discomfort with the depiction of violent sexual acts (Rothman et al., 2015). Qualitative studies can provide valuable insight into how adolescents conceptualize pornography use and what messages they are receiving from pornography. To the researchers' understanding, there is no systematic review of qualitative studies regarding adolescent use of pornography; the purpose of this review is to fill that void.

Study Aim & Objectives

Study Aim
The purpose of this research is to answer the question:

What are young people's views on how pornography exposure or use influences their sexual development, attitudes or behaviors?
- What messages do young people say they are receiving from porn?
- What do young people think about the messages they are receiving from porn?
- What messages would young people say they would like to receive about porn from health educators and other adults?

Objectives
1. To conduct electronic and other searches for qualitative research with young people, aged 10-24.
2. To screen references and reports for inclusion in the review.
3. To extract data from and assess quality of included reports.
4. To synthesize data from included studies using thematic synthesis.

Methods
This review will follow PRISMA reporting guidelines.

Eligibility criteria
An eligibility criteria tool (Appendix 2) has been developed to guide the assessment of qualitative studies based on titles, abstracts and full text. The tool will be piloted on 50 citations to increase the tool's consistency and accuracy in excluding studies that are not relevant to the research question. Studies will not be excluded on the basis of quality. Instead quality will be used to inform interpretation and qualitative weighting of study findings.

Target Population
Studies where the majority of participants are between the ages of 10 and 24 years. No countries will be excluded; however, only studies written in English will be reviewed.

Study Topic
Studies will be included if they report on young peoples' views of pornography.

Types of Studies
Studies that employ qualitative data collection and analysis methods to report on the experiences of young people. Methods must include data derived from study participant directly, such as individual or group interviews.

Date
Studies published from 1997 onwards. The widespread use of the internet has enabled pornography exposure among adolescents; prior to 1997, fewer than 20% of households in the US had access to the internet (U.S. Census Bureau, 2010).

Information sources

Databases
The following databases will be searched: PubMed, APA PsycInfo and Web of Science.

Other Search Methods
In addition to database searching, the following additional search methods will be employed:

1. Reference checking of all studies that meet the inclusion criteria;
2. Subject matter expert contact to identify unpublished or current research (Appendix 3);
3. Google web search of search concepts

Search
A search strategy (Appendix 1) has been developed that includes search terms to be used.

Study selection
All search results will be downloaded into EPPI-Reviewer 4. Using the piloted eligibility criteria guidance tool (Appendix 2), studies will be screened for inclusion based on titles and abstracts. Studies that meet the initial screening (date, language, study design and population) or studies where exclusion cannot be determined by title/abstract will be accessed and assessed. Excluded studies will be coded with an exclusion justification code.

Quality assessment & risk of bias
Included studies will be assessed on their methodological quality. Qualitative studies should account for clarity of aims, rationale, methods and findings as well as the strategies used to establish reliability and the appropriateness of analysis methods and interpretation (Thomas and Harden 2008). A quality assessment tool adapted from Shepherd et al. (Shepherd et al. 2010; Peterson and Bonell 2018) will be piloted by two reviewers and discussed for consistency. Studies will not be excluded based on quality but will be assigned two sets of scores (low, medium, or high) based on reliability and usefulness (Shepherd et al. 2010). Reliability is defined as the extent to which the researchers employed appropriate designs and methods for their stated aims (e.g. reflexivity, participant selection, data collection and analysis). Usefulness is defined as the degree of relevance to this review's research question. Remaining studies will be assessed by the two reviewers. Any disagreements will be discussed and referred to a third reviewer where consensus cannot be reached.

Synthesis of results

This review will use thematic synthesis to code, analyze and synthesize included studies (Thomas and Harden 2008). The process will be conducted in several phases:

1) *Coding and translating studies*. Reviewers will independently read through studies separately to identify and apply descriptive codes through line-by-line coding using a qualitative software (e.g. Dedoose). Reviewers will then meet as a team or in pairs to discuss the findings of each study and to check for consistency across codes and interpretation. Studies will be re-read to apply new or revised codes. First- and second-order themes (i.e. themes derived from direct quotes or from author/researcher interpretations, respectively) will be considered during line-by-line coding.

2) *Develop descriptive themes*. Codes will be organized into descriptive themes by grouping relevant codes that meet criteria for economy, cogency, range and credibility (Noblit and Hare 1988). To ensure descriptive themes are representative of data from the primary studies, themes, codes and studies will be mapped and audited for appropriate fit.

3) *Create analytical themes*. In the final stage, descriptive themes will be organized to develop analytical (or 'third order') themes that address the question of how young people view whether and how pornography exposure or use influences their sexual development, attitudes or behaviors. Analytical themes aim to preserve original study interpretations but 'go beyond' the content of the original study to infer implications for our study question. Reviewers will independently consider analytical themes then meet as a group to discuss. All group meetings will be recorded with enough detail to indicate rationale for theme development. In a final check, analytical themes will be checked against the original papers. The synthesis will be presented narratively and in a synthesis table.

Conclusion

This paper outlines a protocol for conducting a systematic search and synthesis of qualitative studies with the aim of understanding young people's views on how pornography may have shaped their development, attitudes, or behaviors. Findings from this study will help inform strategies or interventions which aim to address potential consequences of early or ongoing exposure to sexually explicit material.

Appendix 1: Search Strategy

Pub Med Core Collection Preliminary Search		
#	**Query**	**Results**
S1	[Title and Abstract]: pornography OR porn OR "sexually explicit material" OR "sexually explicit media" OR "sexual media" OR erotica OR X-rated	
S2	[Title and Abstract]: Teen* OR adolescent* OR youth OR pubescent OR juvenile* OR "young person" OR "young people" OR girl OR "young women" OR "young men" OR "young adult" OR minor	
S3	**S1 AND S2**	
S4	[Title and Abstract]: qualitative OR "focus group*" OR interview* OR narration OR stories OR meaning* OR perspective* OR concept* OR belief* OR attitude* OR perceive* OR perception* OR fieldwork OR "field work" OR "key informant" OR "case stud*" OR ethnograph* OR "purpos* sampl*" OR "content analysis" OR "action research" OR discourse*	
S5	[MeSH Headings]: Qualitative research OR interviews OR grounded theory	
S6	**S4 OR S5**	
S7	**S3 AND S6**	
S8	Limit S7 to yr= "1997-Current"	

Appendix 2: Eligibility Criteria Guidance Tool

Criteria	Description	Guidance
Date	Exclude studies published <u>before 1997</u>	Filter search on date. If filter is not available, apply this criteria first.
Language	Exclude studies written in languages other than English.	Studies performed in all countries are included; exclude studies written in languages other than English.
Type of Studies	Exclude studies that are not qualitative OR did not collect data directly from study participants.	Exclude: • Intervention studies and outcome evaluations • Observational studies measuring quantitative associations • Methodological studies • Policy papers or articles • Opinion/think articles Qualitative studies may include participant observation or ethnography but must include individual or group interviews or other data collected in participants' own words.
Population	Exclude studies where the majority of the population are not between the ages of 10 and 24.	Exclude studies where 51% or more participants are not between the ages of 10 and 24.
Topic	Exclude studies which do not: • Report on adolescent's views of pornography	Exclude studies which do not report on adolescents' views of pornography. Example topics that would be excluded: • Adolescent's views of sexually explicit content in other media (e.g., movies, music, social media) • Adults' views of adolescent pornography or sexually explicit media use

1/8/2020

Dear [ENTER NAME],

I am a researcher at ETR and am undertaking a systematic review of qualitative studies pertaining to *young people's views on how pornography exposure or use influences their sexual development, attitudes or behaviors.* The protocol for the study is available here: [URL]

I am writing to you as a subject matter expert to request information on any studies that meet the following criteria:

- Utilizes qualitative data collection and data analysis methods
- Reports on adolescent views of pornography AND its influence on their sexual development, attitudes, or behaviors
- Published after 1997

If you are aware of any studies that meet these criteria, would you please send me citation information (e.g., author, title, journal and/or year) by [DATE]?

Please feel free to contact me with any questions about the review criteria. I would also appreciate the names and contact information of any additional subject matter experts who might have knowledge of studies that meet the review criteria. My current list of contacts is attached.

Thank you in advance for your assistance.

Best wishes,

[ENTER NAME]

1/8/2020

I am a researcher at ETR and am undertaking a systematic review of qualitative studies pertaining to *young people's views on how pornography exposure or use influences their sexual development, attitudes or behaviors.* The protocol for the study is available here: [URL]

I am writing you to request further information about [ENTER STUDY DETAILS] that could not be obtained during the data extraction process.

If possible, could you provide data for the questions indicated in the attached form by [ENTER DATE]?

In addition, I would greatly appreciate the titles and author names of any additional qualitative studies reporting on young people's views of how pornography exposure or use influences their sexual development, attitudes or behaviors that you may be aware of.

Please feel free to contact me with any questions about the review criteria. I would also appreciate the names and contact information of any additional subject matter experts who might have knowledge of studies that meet the review criteria. My current list of contacts is attached.

Thank you in advance for your assistance.

Best wishes,

[ENTER NAME]

Appendix 5: References

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