Sexual Behaviour, Sexual Health and Pornography

Consumption among Secondary School Students in Iceland

Freyd ś J. Freysteinsd áttir 1* & Ástr ós E. Benediktsd áttir 2

¹ University of Iceland, Reykjav k, Iceland

² Department of Child Protection, Welfare Services in Reykjav k, Reykjav k, Iceland

* Freyd ś J. Freysteinsd áttir, E-mail: fjf@hi.is

Received: February 14, 2017	Accepted: February 20, 2017	Online Published: February 26, 2017
doi:10.22158/rhs.v2n1p55	URL: http://dx.doi.org/10.2215	8/rhs.v2n1p55

Abstract

The aim of this study was to gain knowledge about secondary school student's sexual behaviour and sexual health as well as their pornography consumption. A questionnaire was prepared and answered by 384 students in five colleges selected based on a stratified random sample. Most of the students were 18-20 years of age or 87%. One of the main results was that the majority of the participants had seen pornography (86%). The mean age of participants when they saw pornography for the first time was 13. Men were significantly younger than women when they viewed pornography for the first time and spent more time watching pornography than women. Nearly half of all participants had not always used a condom when they had engaged in sex with a person that they did not have a long-term relationship with. Pornography and its consumption has been constantly growing over the past few decades. One of the main reasons for its growth is increasing technology and easier access to the Internet. Comprehensive sex education has not grown as rapidly as pornography, which can be considered a huge risk factor in the shaping of young people's sexuality and their sexual health.

Keywords

sexual health, sexuality, pornography, pornification, sexual education

1. Introduction

During the last decades, pornography has increased dramatically in the Western world, which has raised concern regarding what effects it might have (Dines, 2010; D'Orlando, 2011). Parallel with the increase in pornography, technology has been changing rapidly and the use of the internet has never been as widespread. The rapid changes and development in technology are believed to be the main causal factors for the massive production of pornography and easy access to it (Howard, 2012; D'Orlando, 2011). Pornography web pages are counted in hundreds of millions (Dines, 2010; Howard, 2012; Paul, 2005). The use of the internet is widespread in Iceland. In 2014 all young people (100%) 16-24 years used the

internet (Statistics Iceland, 2015). Another study showed that half of children between 11 and 16 years old, had computers with an internet connection in their room (Sigurður Ingi Árnason & Þorbjörn Broddason, 2010). Smart phones have been introduced to the market recently and a significant part of the web consumption has moved to such phones (Howard, 2012). In addition, sex is often prominent in movies and music videos on the internet, which might give wrong ideas about sex. Some of this material might even be interpreted as pornography (Dagbjört Ásbjörnsdátir, Guðbjörg Edda Hermannsdátir, & Sigurlaug Hauksdáttir, 2006b).

Studies examining pornography consumption have shown that teenagers as young as 11 years old have seen pornography on the internet (Dines, 2010; Peter & Valkenburg, 2006; Popovic, 2010). A study conducted in Iceland in 2006 showed that young people in the age range 14-18 years old were on the average 11,7 years old when they first saw pornography. Most boys had seen pornography (96%) and the majority of girls as well or (89%) (Sørensen & Knudsen, 2006). When children enter the teenage years they usually begin to be curious about sexual behaviour, sexuality and sexual longings. During that time period they are more likely to look for pornography and some of them seem to think that pornography is educational material (Peter & Valkenburg, 2006). Because of easy access to pornography, young people often do not have a chance to develop their own sexual experience before they see pornography (Lov śa Arnard áttir, 2011). Studies have shown that such experience can prevent them from developing normal attitudes and values regarding sex (Dines, 2010; Popovic, 2011). Studies have also shown that viewing pornography at an early age can have bad influence on their sexual health, especially if they are still developing their sexual awareness and sexual behaviour (Braun-Courville & Rojas, 2009).

Social and cultural factors repeatedly influence values of young people. Behaviour and attitudes change among young people as a result of that (Wade & Tavris, 2010). Where pornography is accepted within subcultures, it is more likely that individuals within those subcultures are more vulnerable towards its influence, than individuals in other subcultures. Acceptance of pornography can be visible and invisible. Thus, bad influence of pornography may not always be conscious (Howard, 2012). Peers have strong influence on individuals during the teenage years. If an individual views pornography as negative, but the peers in the group he is involved with have positive views towards it, they are more likely to alter his view. Furthermore, an individual might consider important to follow the leader in the group or the opinion of a majority of the group instead of following his own ideas about pornography (Guzzetti & Hynd, 2013; Wade & Tavris, 2010). Thus, individuals may start to view various types of sexual behaviour as normal as time passes in a culture that accepts pornography, even though the individual might have considered them abnormal before. By watching pornography, attitudes and behaviour of individuals regarding sex can change. They might develop a sexual script, which is a summary of ideas regarding sex, from the pornography they have watched. By watching pornography, the individual might develop ideas about specific sexual behaviour, such as oral sex, anal sex or group sex (Weinberg, Williams, Kleiner, & Irizarry, 2010).

Bandura (2004) emphasized the importance of education and social cognitive means in order to

improve health. He argued that if individuals did not have the knowledge about what in their life style might cause them harm, they would not have a reason to change it. He emphasized the importance of individuals gaining knowledge about risk factors as well as protective factors in order to gain better health. Thus, it might be considered a right to have access to knowledge about safe and joyful sex (WHO, 2010). In order to promote healthy sex, it is important to promote respect and the right of the individual to their own sexuality and sexual behaviour (WHO, 2015).

Pornography has important limitations. The role of pornography is mainly to stimulate the viewer sexually (Malamuth & Huppin, 2005; Peter & Valkenberg, 2006). However, studies on sex and sexual behaviour have shown that the main reason for engagement in sex is to feel positive feelings, such as joy, intimacy and pleasure. In addition, a healthy sex life can strengthen the emotional tie between individuals (J ána Ingibj ärg J ánsd áttir, 2009). Thus, pornography might limit the emotional experience of teenagers and young people who are experiencing sex for the first time in their life. Thus, it is important to investigate sexual behaviours, sexual attitudes and pornography consumption of young people. The research questions in this study were three. 1) How is sexual health, sexual behaviour and pornography consumption of secondary school students in Iceland, 18 years old and older? 2) Is there a difference between young women and men regarding those factors? 3) Do students who watch pornography engage more in sexual acts than students who do not watch pornography?

2. Method

2.1 Design and Implementation

A stratified random sample was used in this study (Rubin & Babbie, 2014; Þór ðfur Þórlindsson & Þorl åkur Karlsson, 2013) where schools were randomly selected and classes within the schools were randomly selected as well with certain criteria. Five secondary schools were selected out of all 34 secondary schools in the country according to a public list of secondary schools from the Ministry of Education (2015). In order to find out the number of students enrolled in each school, the schools were contacted by phone or e-mail to gain that information. According to the information from the schools, a total of 12700 students were enrolled in all the schools when the study was conducted in 2015. All the schools were listed on an Excel sheet and each school received a range of numbers according to the number of students in each school. The web page *random.org* was used to select five numbers which presented five students on the Excel sheet. The schools were similar in size, 100 students were selected in their range of numbers. The five schools selected were similar in size, 100 students were selected from each or a total of 500 students. Four of them were in the capital city area, one in the capital, Reykjav k and three in towns in the capital city area (Fjölbrautask di Garðabæjar, Flensborgarsk di, Framhaldssk dinn íMosfellsbæ, & Kvennask dinn íReykjav k, n.d.) and one was in a town close to the capital (Fjölbrautarsk di Su ðurnesja, n.d.).

An introductory letter describing the content of the study was sent to the headmaster of each school and permission was gained from each school to submit a questionnaire to 100 students. The school

authorities chose classes randomly where most students were 18 years old or older. Before the questionnaire was submitted to each selected class, the students received verbal introduction about the study. There was also a short introduction describing the main content of the study at the beginning of the questionnaire, as well as the aim of the study. The participants were informed that the study was anonymous and that they were not obligated to answer the questionnaire and could decline to answer any of the questions.

The sex ratio was rather equal in all the schools selected. A total of 384 students answered the questionnaire. Thus, the response ratio was 77%. The main reasons for not answering the questionnaire were: 1) students did not attend the class, 2) a few students were under 18 years of age, and 3) a few teachers were sick and the class was cancelled. None of these factors were related to the study. Since the study was anonymous and the data untraceable, there was no need to report it to relevant authorities (The Data Protection Authority, n.d.).

2.2 Measures

When the questionnaire was prepared, various recent studies on sexual health and pornography were reviewed. One of them was a study on the Sexual Explicit Internet Movies (SEIM), which was both qualitative and quantitative. An interview guide was used in the qualitative part of the study, whereas a questionnaire was used in the quantitative part of the study. Questions were asked in order to explore the influence of pornography consumption on sexual health in six areas; 1) knowledge of sex, 2) sexual behaviour, 3) attitudes towards sex, 4) sexual partners, 5) attitudes towards sexuality, and 6) general sexual health (Hare, 2013). Permission was gained to use questions both from the interview guide and from the questionnaire, but not all questions were used. The questions from the interview guide that were used in this study, were transformed into a quantitative form. Furthermore, questions were used from a study conducted by one of the authors of this article and co-authors which gave permission to use questions from that study (Freysteinsd átir, Sk úlason, Haligan, & Knox, 2014; Freyd ś Jána Freysteinds átir, Sigurgr ínur Sk úlason, & David Knox, 2015). Moreover, two new questions were added to the questionnaire.

The questionnaire was developed based on methodological knowledge of questionnaires, such as structure, appearance, type of questions and wording (Gr dar Þớr Ey þórsson, 2013). The questionnaire included 30 questions. Most of the questions were closed with few alternatives. Two of the questions were scaling questions and two questions were open. The questionnaire was divided into two parts. The first part included four demographic variables and 17 questions about sexual behaviour and sexual health. The second part included nine questions about pornography consumption. Examples of questions/statements in the questionnaire are the following: 1) I have had sex with more than one person at a time (yes/no), 2) How old were you when you saw pornography for the first time?

Questions used from Hare (2013) were translated into Icelandic. The questionnaires used in Hare's (2013) research as well as Freysteinsd áttir et al. (2014) and Freyd ś J ána Freysteinsd áttir et al. (2015) research had both been pre-tested. The questionnaire used in this study was pre-tested as well on seven

students.

2.3 Participants

As previously noted, 384 students from five secondary schools participated in this study. Nearly half were males or 187 (49%) and 193 (50%) were females. Two described themselves as non-gendered and few did not answer the question about gender or a total of 1%. The age range of the participants was from 18 to over 50, however, most of the students were 18-20 years of age (87%). 182 students were 18 years old (49,7%), 92 students (25%) were 19 years old. The mean age of students was highest in the school outside of the capital city area (Fj älbrautask di Su durnesja), but lowest in a school in the capital, Reykjav k (Kvennask dinn íReykjav k).

2.4 Statistical Analysis

When the questionnaire had been submitted to the participants of this study, the answers were entered into a Statistical Package for Social Sciences (SPSS). The results were analysed using both descriptiveand inferential statistics. Descriptive statistics were used in order to describe the responses of the group and compare variables. Inferential statistics were used in order to infer the results from the sample onto the population (Ragnheiður Harpa Arnard átir, 2013).

3. Results

Age and gender of the participants was described in the method section. Nearly half (45.8%) of the women were in an intimate relationship, engaged or married, when the study was conducted. Fewer men were in an intimate relationship, engaged or married (35.6%).

3.1 Sexual Behaviour

Table 1 describes what types of sexual behaviour the participants had engaged in. Nearly all participants had masturbated (93.2%). However, significantly more men had masturbated than women ($\chi^2(1) = 14.14$, p < 0.001). Only 1.7% of men had not masturbated compared to 11.4% of women. Most participants had masturbated a partner and been masturbated by a partner or nearly 80%. However, significantly more women had masturbated a partner and significantly fewer men had masturbated a partner ($\chi^2(1) = 5.227$, p = 0.022). The majority of participants had engaged in intercourse (80.2%). There was not a significant difference between women (84.1%) that had engaged in intercourse compared to men (76.1%) ($\chi^2(1) = 3.74$ (p = 0.053). The majority of participants had provided (77.2%) and received (79.1%) oral sex. The ratio was similar among men and women. Nearly a third of participants had engaged in anal sex.

_	Women	Men	Total
Self-masturbation	163 (88.6%)	178 (98.3%)	341 (93.2%)
Been masturbated	159 (84.6%)	142 (78.5%)	301 (81.6%)
Masturbated partner	157 (83.5%)	132 (73.7%)	289 (78.7%)
Intercourse	159 (84.1%)	137 (76.1%)	296 (80.2%)
Received oral sex	151 (80.3%)	141 (77.9%)	292 (79.1%)
Provided oral sex	153 (80.5%)	32 (73.7%)	285 (77.2%)
Anal sex	58 (31.9%)	49 (28.3%)	107 (30.1%)

Table 1. Sexual Behaviour by Gender

Participants were asked how often they wanted to have sex. More than half of the participants (52.2%) wanted to have sex 2-5 times per week. The ratio was lower that wanted to have sex two to three times per month or more seldom (12.2%). Interestingly, 2.7% of women and 1.6% of men did not want to have sex at all. There was not a significant difference between men and women regarding how often they wanted to have sex ($\chi^2(1) = 3.14$ (p = 0.143).

In table 2, attitudes and behaviours regarding sex can be viewed, that might be expected to be different from the norm. However, fairly many participants replied yes to two of the three questions. Nearly 40% of the participants replied that they would have sex with a person that they were meeting for the first time, if they felt comfortable with them. Significantly more men replied that they would do that than women ($\chi^2(1) = 16.10$, p < 0.001). More than half of the participants had engaged in sex with a person they had neither had a crush on or were in love with. There was not a significant difference between the genders on this variable (p = 0.115). Relatively few participants had engaged in group sex or sex with more than one person at a time. There was not a significant difference between the genders on this variable either (p = 0.939).

Table 2. Sexual Attitudes and Behaviours That Deviate from the Norm

	Women	Men	Total
Would have sex with a person that I am meeting for the	56 (29.5%)	92 (49.7%)	148 (39.5%)
first time, if I would feel comfortable with that person			
Have had sex with a person I did not have a crush on or	112 (58.3%)	94 (50.3%)	206 (54.4%)
was in love with			
Have had sex with more than one person at a time	23 (12%)	23 (12.3%)	46 (12.2%)

3.2 Sexual Health

In order to measure sexual health, the participants answered various types of questions, including questions regarding self-esteem, well-being, attitudes about sex, use of condoms and sex education.

Most participants had a positive self-image of their body. More than half of the participants replied seven or higher on a ten-point scale (with ten meaning very satisfied with my body). However, significantly more men were more satisfied with their body than women ($\chi 2(9) = 35.92$, p < 0.001). Regression analysis showed that the independent variable *gender* explained 6.2% of the variance of the dependent variable *satisfaction with own body* (R² = 0.062; F (24.66) = 80.89, p < 0.001). General happiness was also measured. Most participants (both men and women) indicated their happiness as being seven or higher on a scale from one to ten, with a mean score of 7.72.

Participants were asked about their attitudes regarding sexual behaviour and their abilities to express their sexual needs. Most participants agreed with the statement that they thought it was easy to express their needs and longings regarding sex (74%). There was not a significant difference between women and men on this variable (p = 0.157). Similarly, most participants did not agree with the statement that they thought it was difficult to form an opinion about sex (60%). There was not a significant difference between men and women on this variable either (p = 0.119). However, a similar proportion of participants agreed with the statement that their attitudes changed rapidly regarding sex (33%), as the proportion that disagreed (28%). Most participants or nearly 40% were neutral. There was not a significant difference between women and men on this variable (p = 0.071). The majority of participants wondered what they really wanted regarding sex (62%). There was not a significant difference between men and women on this variable (p = 0.099). Thus, it seems like many of the participants were unsure about what they really wanted in their sex life.

More than half of the participants (59%) did not think it was important to try many sexual acts before they entered an intimate relationship. Significantly more men thought that this was important compared to women ($\chi^2(4) = 16.332$, p = 0.03). Half of the participants (50.5%) thought they could only find out what their sexual longings were by not entering an intimate relationship early. There was not a significant difference between women and men on this variable (p = 0.093). Similarly, more than one third (37%) thought it was important to enjoy sexual freedom while they were young, before they would enter into a serious intimate relationship. Significantly more men thought that this was important compared to women ($\chi^2(4) = 32.02$, p < 0.001). In addition, the majority of participants (83%) agreed with the statement that it is important to have sex with many people before starting an intimate relationship. Interestingly, significantly more women thought that they had always used condoms when they had intercourse with a person that they were not in a long term relationship with. There was not a significant difference between women and men on this variable (p = 0.557).

3.3 Pornography Consumption

As can be seen in Figure 1, the majority of the participants had watched pornography (86%), nearly all of the men (99%) and the majority of the women (73%). The difference was significant ($\chi^2(1) = 51.53$, p < 0,001). The mean age of participants when they had seen pornography for the first time was 13. Of those who had seen pornography, the majority had started to watch pornography at the age of 11 to 17. Most

women started to watch pornography at the age of 15 or 16. However, most men had started to watch pornography at the age of 12 or 13. Thus, men were significantly younger than women when they watched pornography for the first time ($\chi^2(1) = 51.53$, p < 0.001). A few participants had watched pornography for the first time when they were only five years old or younger (1.7%).

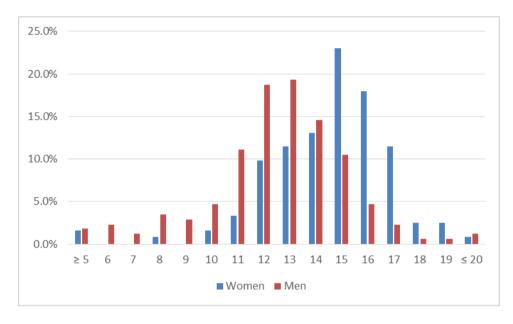


Figure 1. Age When Participants First Saw Pornography, by Gender

Figure 2 shows why participants watched pornography. The majority of participants (67%) replied that they watched pornography while they masturbated, a third for entertainment (34%) and another third out of curiosity (34%). Interestingly, 10% answered that they watched pornography in order to gain education about sex and 14% answered that they watched pornography to learn sexual acts.

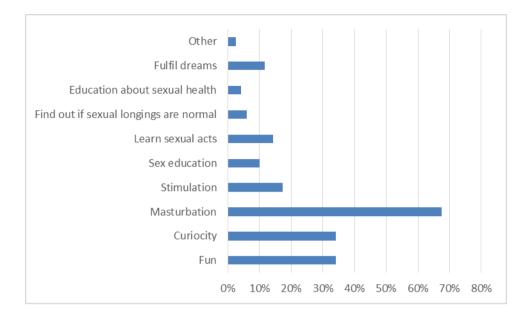


Figure 2. Reasons for Watching Pornography

Participants were asked where they accessed pornography. Most of the participants that had watched pornography answered that they watched pornography on the internet using a computer (91%) and 40% on the internet using a phone. Very few answered that they watched pornography in magazines, on DVD or on television as can be seen on Figure 3.

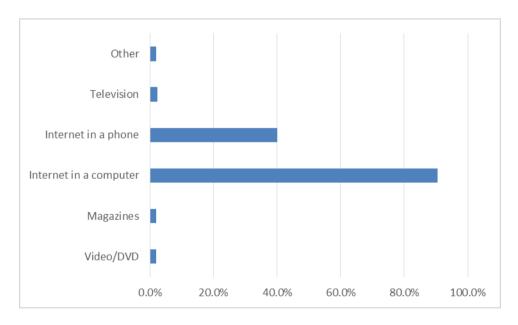


Figure 3. Source of Pornography

Participants who had watched pornography were also asked about the type of pornography they had watched. More than half of them had watched erotic pornography (56%) and heterosexual pornography

(60%). A fifth had watched homosexual pornography (21%) and considerably fewer had watched other types of pornography as can be seen in Figure 4.

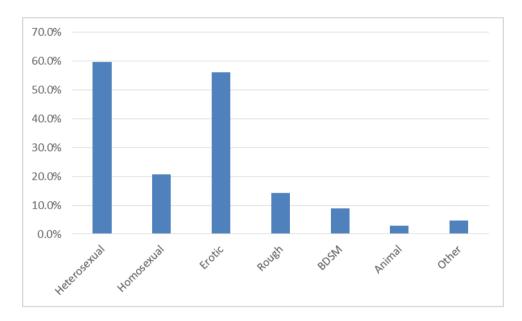


Figure 4. Types of Pornography

Participants were asked to describe their emotions towards pornography. Nearly half of the participants (48%), answered that they had neither positive nor negative feelings towards pornography. A higher ratio of men thought that pornography was positive (41%) than women (17%). Similarly, more women thought that pornography was negative, 81% of those who answered that they viewed pornography as negative were women. Significantly more women had a negative view towards pornography than men ($\chi^2(4) = 33.31, p < 0.001$).

Participants who had watched pornography were asked how often they had watched pornography during the last month. Nearly a third (29%) replied that they had not watched any pornography during the last month. Of those who answered that they had not watched any pornography during the last months the majority were women (79%). Among those who had watched pornography once during the last month, the majority were also women (76%). However, more men (85%) than women (25%) had watched pornography between two and three times per week, up to once per day or more often during the last month. Interestingly, no woman answered that she watched pornography once per day or more. However, 6% of men answered that they watched pornography once per day or more.

When participants who had watched pornography (86.1%) were compared to participants who had not watched pornography, the participants who had watched pornography were more likely to have experienced sexual acts. Nearly all participants (98.3%) who had watched pornography had masturbated ($\chi^2(1) = 85.70$, p < 0.001), 85% of them had been masturbated by a partner ($\chi^2(1) = 21.49$, p < 0.001) and 81.9% had masturbated a partner ($\chi^2(1) = 17.73$, p < 0.001), 82.7% of them had engaged in intercourse

 $(\chi^2(1) = 12.24, p < 0.001)$, approximately 80% of them had received $(\chi^2(1) = 11.98, p = 0.001)$ or performed $(\chi^2(1) = 21.83, p < 0.001)$ oral sex and finally 33.8 of them had had anal sex $(\chi^2(1) = 12.25, p < 0.001)$.

4. Discussion

The aim of this study was to investigate sexual behaviour and sexual health of secondary school students in Iceland by gender. Also to investigate pornography consumption of secondary school students. A stratified random sample was used to select students from five secondary schools out of 32 which are located in the country. Out of 500 students chosen, 100 from each school, 389 answered a questionnaire. Thus the response ratio was 78%. The age of participants was from 18 to over 50, however, most of the students were 18-20 years of age (87%). The gender ratio of participants was fairly equal.

Young people in Iceland seem unguarded against pornography that exists in the world. With increased technology, the access to pornography has increased dramatically (Howard, 2012; Peter & Valkenburg, 2006). The use of the internet has increased during the last years and is 100% among 16-24 year olds in Iceland (Statistics Iceland, 2015). This development makes access to pornography easier (Howard, 2012; Peter & Valkenburg, 2006). Over 90% of those who had watched pornography watched it on the internet on a computer and 40% on their phone. In a study conducted in the U.S. a few years earlier, most participants accessed pornography in movies and on DVD, fewer accessed it on the internet (Bleakley, Hennessy, & Fishbein, 2010). Easier access to pornography decreases the likelihood that young people can develop their own sexual experience before they watch pornography (Lov śa Arnard áttir, 2011).

The majority of participants had watched pornography or 86%. Significantly more men (99%) had watched pornography than women (73%). The participants were on average 13 years old when they first watched pornography. That is two years later on average than in previous studies that have been conducted (Dines, 2010; Peter & Valkenburg, 2006; Popovic, 2010), including one study that was conducted in Iceland about ten years earlier (Sørensen & Knudsen, 2006). Men were significantly younger than women when they first watched pornography. A few participants (1.7) were very young when they first watched pornography, five years old or even younger. Even though over 70% of the participants had tried all sexual acts that were asked about in this study, except anal sex (31%), participants who had watched pornography were more likely to have tried each of the sexual acts asked about in this study, than participants who had not watched pornography.

Two thirds of participants replied that the purpose of watching pornography was to do it while they masturbated and a third answered that they watched it for fun. Interestingly, 14% watched pornography to learn about sexual acts. Most participants watched heterosexual and erotic pornography. Men spent significantly more time watching pornography than women, over 40% of men watched pornography two to five times per week. These results are similar to results from a study conducted in the U.S. which showed that 50% of 13-18 year olds watched pornography regularly.

The majority of the participants or over 70% had tried various sexual acts (masturbation, masturbated a

partner, been masturbated by a partner, provided oral sex, received oral sex and had engaged in intercourse). Fewer had engaged in anal sex or about 30%, which is a considerable higher ratio than 6% found in the study conducted by Akers et al. (2011) and 10% found in a study conducted by Haydon, Herring, Prinstein and Halpern (2012). In addition, 12% of the participants in this study had engaged in group sex. Previous studies show that young people who watch pornography are more likely to try anal sex, to have more sexual partner and to engage in group sex, compared to young people who have not watched pornography (Sørensen & Knudsen, 2006). Nearly half of the participants in this study had not always used a condom when they had sex with a person they were not in a long term relationship with. About 40% of the participants answered that they would have sex with a person the first time they met them, if they felt comfortable with them and over half of the participants had had sex with a person that they did not have a crush for or were in love with. Men were significantly more likely than women to have had sex with a person they did not have a crush on or were in love with. Thus, a considerable part of participants seems to have a relaxed attitude regarding sex, which might even be considered as carelessness especially regarding the use of condoms. A culture where pornography is so widely consumed by young people might lower moral standards and decrease secure sex.

There was a significant difference between the genders on several factors. More men watch pornography than women, which supports the results of former studies (Dines, 2010; Weinberg et al., 2010), including studies that have been conducted in other Nordic countries (S ørensen & Knudsen, 2006). Furthermore, men spend more time watching pornography than women and they start to watch pornography at a young age than women as has been seen in previous studies (Dines, 2010; Weinberg et al., 2010). Moreover, more men that had watched pornography had a positive attitude towards pornography than women who had watched pornography. Thus, men seem to be stronger consumers of pornography than women. There was a difference between men and women regarding two types of sexual acts out of seven. More men had masturbated than women and more women had masturbated a partner than men. In addition, women seemed more unsure about their opinions regarding sex and their longings in sex than men. Furthermore, more women than men thought it was important to have sex with many individuals before they would enter a long term relationship. These results indicate that women do not have as strong position as males in a culture, where the influence of pornography is strong.

4.1 Limitations

There are few limitations to this study. First, it only includes participants from the south-west corner of the country. It might have been more interesting to divide the country into four parts and choose randomly one school from each part. Because the schools were in Reykjav k and in Reykjanes, the study results can only be generalized for that area and not for other areas in the country. We cannot know how effected by pornography the other areas are. In addition, it would have been better to ask about all types of contraception, not only about condoms. Finally, a question about attitudes towards pornography was in the section of the questionnaire with other questions about pornography. Thus, only those participants who had watched pornography answered that question, but it might have been

better to gain answers from all participants to that question.

4.2 Future Implications

A culture where pornography plays such a big role might put young people at risk. It might lower the social morality of young people. Young people in such a culture might think less about their security when engaging in sex, since condom use is much lower than might be expected in an informed community. In order to work against the influence of pornography in the culture, it seems important to provide more education about relationships, intimacy and sex. Educational material has been produced, such as a book about girls and boys that includes sex education for youngsters in elementary schools (The National Center for Educational Material, 2007). A web side has been created that includes detailed information about the body, sexual development, sex, protection, health and child birth (The National Center for Educational Material, 2008). Educational material has also been created, with an emphasis on that both partners agree on sexual acts, that sex should be enjoyable and force should not be used (S dey S. Bender, 2012). More educational material has been developed which will not be mentioned here. However, these results indicate that parents need to discuss this subject more with their children and teachers with their students.

References

- Akers, Y. A., Gold, M. A., Bost, J. E., Adimora, A. A., Orr, D. P., & Fortenberry, J. D. (2011). Variation in sexual behaviors in a cohort of adolescent females: The role of personal, perceived peer, and perceived family attitudes. *Journal of Adolescent Health*, 48, 87-93. https://doi.org/10.1016/j.jadohealth.2010.05.004
- Bandura, A. (2004). Health promotion by social cognitive means. *Health Education Behavior*, *31*, 143-164. https://doi.org/10.1177/1090198104263660
- Bleakley, A., Hennessy, M., & Fishbein, M. (2011). A model of adolescents' seeking of sexual content in their media choices. *Journal of Sex Research*, 48, 309-315. https://doi.org/10.1080/00224499.2010.497985
- Braun-Courville, D., & Rojas, M. (2009). Exposure to sexually explicit web sites and young adult sexual attitudes and behaviors. *Journal of Young Adult Health*, *45*, 156-162.
- D'Orlando, F. (2011). The demand for pornography. *Journal of Happiness Studies*, 12, 51-75. https://doi.org/10.1007/s10902-009-9175-0
- Dagbj ört Ásbj örnsd óttir, Gu ðbj örg Edda Hermannsd óttir, & Sigurlaug Hauksd óttir. (2006). Samskipti foreldra og barna um kynl f (endursko ðu ð 2009) [Communication between parents and children about sex (revised 2009)]. Reykjav k: Lýðheilsustöð, Forvarnarnefnd Reykjav kurborgar og Landlæknisembætti ð.
- Dines, G. (2010). Pornland: How porn has hijacked our sexuality. Boston: Beacon Press.
- Freyd ś Jóna Freysteinsdóttir, Sigurgr ínur Skúlason, & David Knox. (2015). Parsamband, kynl f og myndun fjölskyldu-viðhorf háskólanemenda [Relationship, sex and forming of a family-attitudes

of college students]. T ínarit f álagsr áðgjafa, 9(1), 40-45.

- Freysteinsd áttir, F. J., Skulason, S. C. H., & Knox, D. (2014). U.S. and Icelandic college student attitudes toward relationships/sexuality. *College student journal*, 48, 355-361.
- Gr étar þór Ey þórsson. (2013). Spurningakannanir: Um orð og orðanotkun, uppbyggingu og framkvæmd [Questionnaires: About wording and the use of words, structure and implementation]. In Sigr íður Halld órsd óttir (Ed.), *Handb ók í að fer ðafræði ranns ókna* [Handbook on methodology in research] (pp. 453-472). Akureyri: H ásk ólinn á Akureyri.
- Guzzetti, B. J., & Hynd, C. R. (2013). Perspectives on conceptual change: Multiple ways to understand knowing and learning in a complex world. London: Routledge.
- Hare, K. (2013). Past Penthouse Pornography: A study of sexual health and youth's consumption of sexually explicit internet movies (Unpublished MA-thesis). Dalhousie University: Halifax, Nova Scotia.
- Heydon, A. A., Herring, A. H., Prinstein, M. J., & Halpern, C. T. (2012). Beyond age at first sex: Patterns of emerging sexual behavior in adolescence and young adulthood. *Journal of Adolescent Health*, 50, 456-463. https://doi.org/10.1016/j.jadohealth.2011.09.006
- Howard, R. (2012). Anticipating an "anything goes" world of online porn. The Futurist, 46, 42-45.
- Jóna Ingibjörg Jónsdóttir. (2009). *Kynl f: Heilbrigði ást og er át k* [Sex: Healthy love and erotic]. Reykjav k: Bóka útgáfan Opna.
- Lov śa Arnard óttir. (2011). *Sta ða barna á Íslandi* [The situation of children in Iceland]. Reykjav k: UNICEF.
- Malamuth, N., & Huppin, N. (2005). Pornography and teenagers: The importance of individual differences. *Young Adult Medicine Clinics*, 16, 315-326. https://doi.org/10.1016/j.admecli.2005.02.004
- Ministry of Iceland. (2015). *Stofnanir* [Institutions]. Retrieved December 3, 2015, from http://www.menntamalaraduneyti.is/stofnanir/
- Paul, P. (2005). Pornified: How pornography is transforming our lives, our relationships, and our families. New York: Henry Holt & Co.
- Peter, J., & Valkenburg, P. (2006). Adolescents' exposure to sexually explicit internet material. *Communication Research*, *33*, 178-204. https://doi.org/10.1177/0093650205285369
- Popovic, M. (2011). Pornography use and closeness with others in men. *Archives of Sexual Behavior*, 40, 449-456. https://doi.org/10.1007/s10508-010-9648-6
- Ragnhei ður Harpa Arnard átir. (2013). Megindlegar ranns áknir: Ger ð ranns áknar áætlunar og yfirlit yfir helstu ranns áknarsni ð [Quantitative research: Conducting a research plan and an overview over the main research designs]. In Sigr íður Halld órsd áttir (Ed.), *Handb ák í a ðfer ðafræ ði ranns ákna* [Handbook on methodology in research] (pp. 377-391). Akureyri: Hásk álinn áAkureyri.
- Rubin, A., & Babbie, E. R. (2014). *Research methods for social work* (8th ed.). Boston: Cengage learning.

- S dey, S. B. (2012). Ferlismat á nýju kynfræðsluefni fyrir unglina [Process evaluation on a new sex education material for teenagers]. *T ínarit hj úkrunarfræðinga*, 88, 48-56.
- Statistics Iceland. (2015). Tölvu-og netnotkun klendinga 2002-2014 [Computer-and internet use of Icelandic people 2002-2014]. Retrieved October 30, 2015, from http://www.px.hagstofa.is/pxis/pxweb/is/Atvinnuvegir/Atvinnuvegir_visinditaekni_Upplysingat aekni_UTlykiltolur/SAM07102.px/table/tableViewLayout1/?rxid=7d142682-95a1-4329-8fb5-21 67fb66ff15
- Sørensen, A. D., & Knudsen, S. V. (2006). *Unge, køn og pornografi i Norden*. Nordisk Ministerr åd. Retrieved May 20, 2015, from http://www.norden.diva-portal.org/smash/get/diva2:700832/FULLTEXT01.pdf
- The Data Protection Authority. (n.d.). *Almennt um tilkynningarskylda vinnslu* [General information about notification processing]. Retrieved February 10, 2017, from http://www.personuvernd.is/tilkynningar/um-tilkynningarskylduna/
- The National Center for Educational Material. (2007). *Um stelpur og str åka* [About girls and boys]. Retrived December 12, 2015, from http://www1.nams.is/kyn_torg/umstelpurogstraka_vef.pdf
- The National Center for Educational Material. (2008). *Kynfræðsluvefurinn* [The sex education website]. Retrieved December 12, 2015, from http://www1.nams.is/kyn/index.php

Wade, C., & Tavris, C. (2010). Psychology (10th ed.). New Jersey: Prentice Hall.

- Weinberg, M. S., Williams, C. J., Kleiner, S., & Irizarry, Y. (2010). Pornography, normalization, and empowerment. Archives of Sexual Behavior, 39, 1389-1401. https://doi.org/10.1007/s10508-009-9592-5
- WHO. (2010). Developing sexual health programmes: A framework for action. Retrieved October 18, 2015, from http://www.apps.who.int/iris/bitstream/10665/70501/1/WHO_RHR_HRP_10.22_eng.pdf
- WHO. (2015). Sexual health, human rights and the law. Retrieved October 18, 2015, from http://www.apps.who.int/iris/bitstream/10665/175556/1/9789241564984_eng.pdf?ua=1
- Þór ólfur Þórlindsson & Þorl ákur Karlsson. (2013). Úrt ök og úrtaksa ðfer ðir ímegindlegum ranns óknum [Samples and selection methods in quantitative research]. In Sigr íður Halld órsd óttir (Ed.), *Handb ók í a ðfer ðafræði ranns ókna* [Handbook on methodology in research] (pp. 113-128). Akureyri: Hásk ólinn á Akureyri.